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ORGANIZATION AND OPERATION OF A LOCAL PROGRAM OF VOCATIONAL EDUCATION.

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This document is intended as a guide for persons who have major responsibilities for developing new programs of vocational and technical education under public sponsorship at local levels. It is also written for use by teachers in all types of vocational programs, guidance personnel, and teacher educators who are preparing vocational teachers and leaders. Chapter titles are: (1) The Purpose and Scope of the Publication, (2) Vocational Education in a Time of Rapid Technological Change, (3) Legislation Promoting and Supporting Vocational Education, (4) The Goals and Purposes of Vocational Education at the Local Level, (5) Planning the Local Program of Vocational Education, (6) Determining the Scope and Nature of the Program, (7) The Effective Use of Advisory Services, (8) Vocational Education and Related Services, (9) The Job of the Local Administrator of Vocational Education, (10) Leadership in Vocational Education, (11) Manning the Program with Effective Personnel, (12) Financing the Local Program of Vocational Education, (13) The Improvement of Instruction, (14) The Vocational Student, (15) Providing Facilities and Equipment for the Program, (16) The Role pf the Practical Arts in Vocational Education, (17) Evaluating the Program, and (18) The Vocational Leader and Research. (MM)

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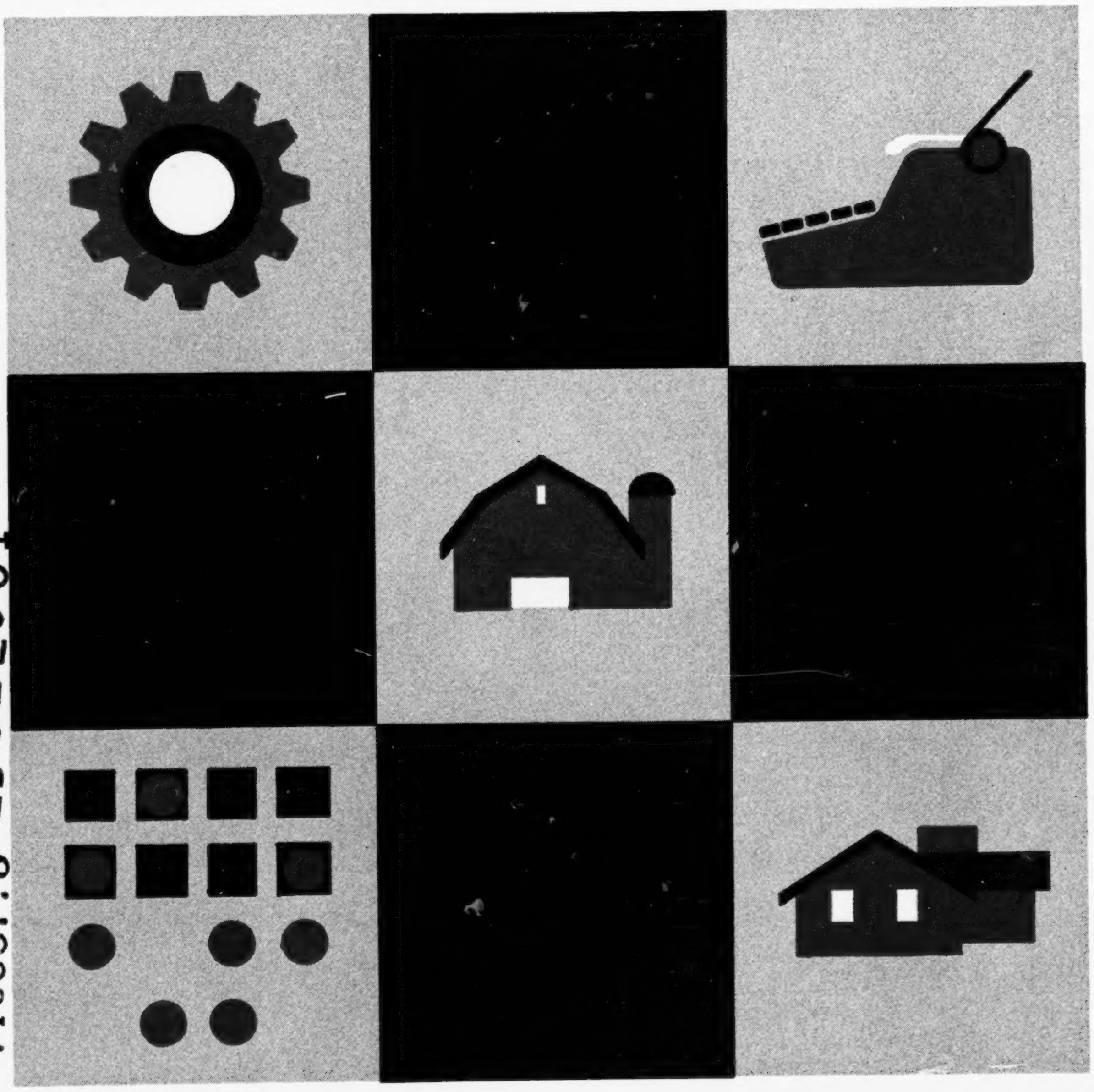

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FOREWORD

Local programs of vocational and technical education have been expanding into new geographical areas as well as into new subject matter areas. This publication entitled Organization and Operation of a Local Program of Vocational Education deals with establishing, maintaining, and improving comprehensive programs of vocational and technical education.

The challenge in its preparation was to glimpse the present and to provide a long look into the future as vocational education moves into a decade of tremendous growth. By 1975 it is estimated that there will be 14 million persons enrolled in vocational and technical education programs. This would mean approximately doubling the present enrollment. Many new programs will of necessity be opened to accommodate this 100 percent gain. Additionally, many programs will be expanded.

Vocational and technical education will find it important to provide many new and unique services to serve the growing numbers who will want access to vocational training. This publication describes services and delineates many staff positions important in increasing the social, civic, economic, and phychological impact of programs on trainees and the community.

The publication should prove to be a valuable guide for administrators of vocational and technical education programs–be they Superintendents of schools, Directors, Coordinators, or Deans. The references at the end of each chapter provide added resource material helpful to those who desire to pursue information in depth.

Leon P. Minear
Director, Division of
Vocational and Technical Education

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Chapter I

THE PURPOSE AND SCOPE OF THE PUBLICATION

THE PURPOSE OF THE PUBLICATION

This publication is intended as a helpful guide for persons who have major responsibilities for developing new programs of vocational and technical education under public sponsorship at local levels. It is also directed to those with similar responsibilities for existing programs, as they face the necessity of re-examining what exists, changing whatever requires change, and expanding and extending the service which the programs were created to provide.

Fast changing technological and economic forces which shape American society and American education have brought about, quite recently, a burst of new support, new resources and new demands for vocational education. The whole movement is being energized and stimulated toward new growth and is being asked to assume added dimensions of service. It is hoped that this publication will assist those who will be called upon to guide and direct vocational education during this period of growth and change. In such a period it is especially important that planning be based upon policies which are sound, and that the best tested experience of the past be merged with the most promising new approaches of the present and the future.

In directing this publication largely to those who conduct programs at the local level, the intent is to give particular attention to the concerns which arise and the decisions which have to be made at that level. What is suggested will also be of interest and value to others who occupy roles which relate closely to the local program. A local program is one which serves and is supported by the basic, local political and population unit. Local programs, in practice, may be found under the sponsorship of a local school district, a group of adjoining school districts in the form of an intermediate district, a community college district, or a county. Occasionally other sponoring arrangements are found.

Among those who may find this publication helpful will be superintendents of schools, curriculum and program planners, local directors of vocational programs, principals of vocational schools and principals of comprehensive secondary schools. It should also prove useful to administrators of post-high school programs of occupational education, whether this be in a community college, a technical institute or an area vocational center. It is also written for use by teachers in all types of vocational programs, by guidance personnel and by teacher educators who are preparing vocational teachers and leaders.

TYPES OF PROGRAMS

The forms of occupational education which are discussed in this publication may be found in a variety of established and familiar patterns of organization, and some new ones. Some represent arrangements which have been used widely in the past. Others are of more recent origin. Some are more popular and more fully developed in certain States or regions than others.

PROGRAMS IN SECONDARY SCHOOLS

Vocational education is offered as pre-employment preparation in the secondary school. Under this plan vocational programs are usually taught in grades eleven and twelve, and less frequently in grades nine and ten. The areas of office education, distributive education, agriculture, trades and industries, health occupations, and home economics are found at this level. Administratively, two kinds of organization have been common for such programs. One has the student attend a completely separate vocational high school where he studies not only his vocational speciality, but also related and general subjects. An alternate plan offers vocational courses, together with the college entrance and other general and academic subjects in the same secondary school, which is often called a comprehensive high school. Both plans are recognized in the discussions which follow.

PROGRAMS IN POST-HIGH SCHOOLS

This publication relates to the occupational preparation offered in junior colleges, community colleges and technical institutes. These range from the technical institute, where all instruction is directed to preparing students for technical jobs, to the more numerous community colleges which provide both occupational and liberal arts education. The curriculums in such schools seldom vary from the two years, post-high school pattern, and the occupations for which training is offered are often technical or para-professional in character. It is possible that the future may see such schools adding a wide variety of courses which will be less than two years in length and which will not be limited to the technical categories.

PROGRAMS IN AREA SCHOOLS

Under development at this time in many places is the area vocational school. Such a school often serves students from a number of participating secondary schools which have transportation accessibility to the school. Students attend the area school on a half day basis, where only the vocational subjects are offered. They remain officially registered with their home school which provides for all educational needs except the specialized vocational training.

Area vocational schools may also serve full-time high school students who are preparing for employment. The department of a comprehensive high school which provides training for at least five occupations may qualify as an area vocational school. In addition, a vocational school which enrolls those who have completed or left high school and the division of a community college which offers at least five occupational curriculums may be designated as area vocational schools.

COOPERATIVE EDUCATION PROGRAMS

Still another form of program organization makes use of the cooperative plan. Under this plan the student spends approximately half his time in the school itself and the rest of his time engaged in paid employment in the role of an occupational learner. His work experience provides the actual vocational preparation, as a part of an organized training program which is intended to lead to full time employment at the conclusion of the program. Such programs are also called vocational-cooperative programs. They have been used rather widely in distributive, office, industrial, and service occupations. The learner-worker is supervised on the job by the employer, the program is coordinated by the school staff, and the in-school experience provides work-related instruction as well as a basic general education.

PROGRAMS FOR ADULT WORKERS

Both secondary and post-secondary schools may and do provide special programs for training and re-training unemployed workers. These may be mature workers who have lost their jobs because of technical displacement, or young adults who seek training for first employment. Programs of this kind are often sponsored by local school districts, and, in some cases, by community colleges or technical institutes. They may also take the form of on-the-job training, sponsored by a business or industry, which may then call upon the school to provide related instruction.

Community colleges and junior colleges, evening high schools, and adult education centers frequently provide for the upgrading training of employed workers, often in close cooperation with local employers, public and private. Area vocational schools offer similar opportunities. An additional service to be found in many local programs is the related instruction for registered apprentices who are receiving their practical training on the job.

WHAT VOCATIONAL EDUCATION MEANS

In the discussion which follows, vocational education and occupational education will be used as equivalent terms, and both include technical education. Both terms will be intended to mean any form of education, training or re-training which is designed to prepare persons to enter or continue in gainful employment in any recognized occupation. The only occupations which are excepted are those which are designated as professional or which require a baccalaureate or higher degree. Clearly, this is a very broad and inclusive meaning for the term vocational education. Yet it expresses the concept established by the Vocational Education Act of 1963 and defines a scope of responsibility which vocational leaders must be prepared to accept. Such areas as technical education, agricultural education, office education, distributive education, trade and industrial education, certain aspects of home economics education, as well as others, are considered to be special categories and are subsumed under the term vocational or occupational education.

As defined herein, vocational education also includes the vocational guidance and counseling that precedes or parallels the preparation for employment or re-employment. Recent Federal legislation incorporates such guidance service into the vocational education and provides funds for its support.

When vocational education is viewed from this broad perspective, it extends well beyond any or all of the traditionally funded branches of service although it includes them all. It includes all recognized occupations, except the professions which may provide an opportunity for a job and for which an individual may be prepared.

THE PRIMACY OF THE INDIVIDUAL

The focus of this volume is upon the occupational needs of people rather than upon categories of occupations. The emphasis is more upon people in need of preparation for work than upon occupations in need of people, although the need for congruence between the two is clearly recognized. Among those who must be assisted to enter or to remain in the world of work are students in the latter years of high school, and those who have completed high school and who require further training in preparation for work. Beyond these, vocational education must be ready to serve any other individual who, for any reason, needs training or retraining for entrance into employment or to maintain his place in the work force. High priority must be given to the needs of those who suffer from academic, socio-economic and other handicaps which prevent them from succeeding in regular programs of vocational education and from access to jobs.

VOCATIONAL EDUCATION AS A SOCIAL BENEFIT

By making the individual youth and adult the beneficiary of vocational education, we contribute at the same time to the manpower needs and the economic needs of society. Indeed, the real test of our programs will be the extent to which they produce the effective person–the productive, adaptive, perceptive, self-disciplined, free man.

DEFINITION OF TERMS

Throughout this publication there will occur many specialized terms which form part of the vocabulary of vocational education and closely related activities. Whenever the discussion seems to require it, such terms will be defined. Some of the definitions derive their meanings from legislation, from official usage, from Federal and State regulations, and other sources. In general these are consistent with the definitions which appear in the booklet published by the American Vocational Association entitled Definitions of Terms in Vocational and Practical Arts Education. This booklet has been used as the basic source for defining the terms used in this bulletin.

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Chapter II

VOCATIONAL EDUCATION IN A TIME OF RAPID TECHNOLOGICAL CHANGE

Men have always had to cope with change. Throughout history there has been continuous technological change and it has always influenced the cultures of man. It has always affected the activities of man in his efforts to secure or produce a living which, in more advanced cultures, have become identified with occupations or jobs. During all of human history, until quite recently, the pace of technological change was slow with much overlap from one generation to the next in social, cultural and economic patterns. In particular, with relation to occupations, the changes were not fast enough to seriously disrupt the character of the work done by most workers during their span of working years. A useful occupation learned in youth could be counted on to produce a livelihood as long as a man was likely to work. All this is changing rapidly. We happen to live in a time when the always accelerating pace of technological change is able to produce rather complete changes in the nature of an occupation within the space of a few years. The changes may be so extensive that the occupation is not only substantially altered, but actually eliminated. Predictions are that in the near future this may happen, not once, but several times during the working lifetime of some workers. Automation is usually associated with this process. But automation is but one aspect of a broader movement consisting of many interacting and powerful technologies.

THE EFFECTS OF TECHNOLOGY ON JOBS

The accelerating impact of technology not only causes present jobs to disappear, but, as technology has always done, it results in the emergence of new, previously unknown jobs. Often the persons who performed the old jobs are not capable of undertaking the new ones. They require further education and re-training before they can do so. The ability to absorb the additional training may become a problem, for there is reason to believe that the trained person is more adaptable to further training. Jobs created by the new technology seem to have several characteristics which differ from the jobs which tend to phase out. They involve fewer manual skills and more cognitive skills. They often call for skills of a higher order and for the use of more technical knowledge. Their performance usually requires a more complete and more functional general education than the jobs which they replaced. In many cases more maturity is needed by the worker in order to fill the job successfully. It is likely that the future worker will find versatility more valuable than a high degree of specialization.

Modern technology is creating an increasing number of jobs which provides services, rather than produce goods or food. Sometimes these call for combinations of more traditional skills, and the area of agri-business is a good example of this. Often they demand different kinds of skills, which may be described as interpersonal or social skills, as well as technical knowledge.

THE EFFECTS OF TECHNOLOGY DIFFER

Although technology clearly brings about the elimination of some unskilled and low-skilled occupations, it also tends to have substantial effects upon more highly skilled jobs. Its consequences are beginning to invade the middle management and higher levels of the occupational structure. It has had profound effects on agricultural occupations and upon home-related occupations.

Nevertheless, the effect of technology upon occupations is quite variable. It should not be assumed that all older occupations have become obsolete or should be excluded in planning for programs of vocational education. The rate of change found in different occupations varies widely although in all occupations the rate tends to increase. There seems to be no reason to expect that this trend will be slowed down or reversed.

The vocational educator needs to be well informed about the progress and current developments in technological change, so that he may respond wisely, and so that the programs he plans and operates will remain continually relevant to the real world of work. He should not be surprised if changes which presently seem remote occur much sooner than expected. In any case, flexibility and the ability to anticipate need will be essential. If the program of public vocational education cannot exhibit this flexibility, other agencies will be quickly created, often on an ad hoc basis, to meet the needs.

IMPLICATIONS OF TECHNOLOGY FOR VOCATIONAL EDUCATION

Practices and policies of vocational education in its earlier forms sprang from the social and economic realities of the time for which they were designed, and these in turn related to the existing state of the technology. Before the rate of technological change had reached its present level, these practices did not require re-examination or revision very often. The assumptions on which they were based remained valid for long periods of time. Because of the accelerating and pervasive character of technological change, and the corresponding social changes which are induced by it, this is no longer true. Some of the practices and policies of the past are no longer appropriate. Some are still useful but many soon need modification while still others may continue to be viable for the forseeable future. The vocational educator must learn to continually re-examine his assumptions and to respect traditions only so long as they are compatable with the real needs of people.

VOCATIONAL EDUCATION NOT TERMINAL

In the past there has been a tendency for most pre-employment vocational education to be planned as terminal education. Provision has always been made for the periodic up-dating of workers through the extension forms of vocational education, but this has usually taken the form of intermittent training for those engaged in stable, lifetime occupations. It is now clear that no form of education, vocational or non-vocational, can become terminal, but must be planned as open-ended and continuous. It must provide workers with complete re-training for new jobs, as well as for continuity in present jobs. A major responsibility of vocational education will be to develop a readiness and a capacity for a lifetime of learning and re-learning of occupational skills amd knowledge. It has been said that the future of work consists of earning a living in the automation age.

NEED FOR EXTENDED SCOPE

Vocational education has traditionally emphasized preparation for the highly skilled and technical occupations in agriculture, the skilled trades, office occupations, distributive occupations and home economics. This has meant that the greater part of its service has been directed toward those who could qualify for such occupations. Current technological change creates the need for vocational education to extend greatly the scope of its services. It must serve persons in all possible categories of occupational life, excluding the professions which are served by the professional schools. This will include education in a wide range of skills and knowledge, through a wide range of age groups, for both sexes, all races, and for persons at various social, educational and economic levels. Vocational education will need to offer preparation for any form of work for which workers are needed, and for which individuals can possible be helped to qualify. Some professional fields show an increasing need for sub-professionals, including areas of health, education, social work, and public service.

OCCUPATIONAL CHANGE AND CAREER CHOICE

Vocational educators will need to be continually informed about actual and impending changes in occupational life expressed in broad terms. This means more than discovering what new tools, materials or processes are coming into use in particular trades or jobs. It involves current knowledge of major social and economic trends and a wide perspective on the forces and relationships which shape the occupational life of the nation. To do this requires more than periodic studies or surveys of local conditions. It will be necessary to tap many sources of information and to rely upon many agencies of government, business, industry and education in order to keep well informed.

In the growing complexity of the processes of career choice and career change, there will be greater need for vocational counseling for both young people and adults. More counselors will be needed and they will need to be better prepared to assist those who require help in making career and job choices. The vocational educator and the trained counselor will need to work hand in hand with each understanding and respecting the role of the other.

THE IMPORTANCE OF GENERAL EDUCATION

One effect of technological advance upon occupations has been to raise the basic educational requirements for most jobs. This means that the learnings which in the past have been considered to be general education are becoming continually more essential as part of the preparation for work. Their importance is being felt in at least three ways. First, more and more jobs are dependent upon an increasing amount of general education as a pre-requisite for learning their specialized aspects. Second, the skills and understandings developed by general education–especially those of a verbal, scientific and mathematical nature–turn out to be the actual occupational skills of more and more occupations. Third, a substantial amount of general education is needed to provide the future worker with the intellectual tools he will need for continued learning–for a lifetime of earning a living.

The trend toward an increased component of general education and of technical content in most occupations suggests a greater need for preparing workers for technical occupations. More jobs will take on the character of technician occupations, but many of these will not be related to the physical sciences. Instead, they will reflect the growing shift to occupations which are oriented toward the social and personal services in a changing world of work and leisure. Ultimately, most of this training will take place in programs which include part or all of the thirteenth and fourteenth years of school.

TECHNOLOGY AND THE FUTURE OF VOCATIONAL EDUCATION

In planning for new programs of vocational education or the improvement of existing programs, the influence of swift technological change must be understood and accounted for. The kinds of work which individuals prepare for will continue to undergo changes, both in nature and in content. Continuity in work life will be interrupted for many workers, requiring fresh preparation for new tasks. No education can be considered as terminal. Jobs will tend to disappear in the inverse order of the amount of education and skills which they require, and those which make the fewest educational demands will always be the most vulnerable. The relative need for manual and crafttype skills will decrease, even while the over-all need for skilled workers will rise. The new skills of the new jobs will tend to be of a different order. Technical knowledge and conceptual skills will become major ingredients of many occupations while technical knowledge combined with social skills will be required by many others. A more complete general education will be necessary for most workers as a base of support for occupational training and to enable the worker to adapt to further training. Career choice will become more complex, and will call for more assistance from professionally trained people. Career decision making will tend to be prolonged, and, together with an extended period of general education, will somewhat advance the age at which serious vocational preparation will be begun. Future programs must achieve greater flexibility in order to satisfy more diverse needs for a more diverse population. The opportunity to contract for services which are not available in the standard school setting should increase this flexibility.

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Chapter III

LEGISLATION PROMOTING AND SUPPORTING VOCATIONAL EDUCATION

THE FEDERAL GOVERNMENT AND VOCATIONAL EDUCATION

Although the Federal government has given encouragement and support to education since the early days of its history, vocational education was one of the first areas of education to receive the direct benefit of Federal funds under legislation intended to stimulate its growth and development. The Morrill Act of 1862, which established the colleges of agriculture and mechanic arts, is often cited as a beginning of the Federal relationship to vocational education. Later, the growing need for trained manpower in the nation's rising economy, and the diminishing supply of immigrating skilled workers from abroad, led to efforts by educational, business and labor leaders which culminated in the passage of the Smith-Hughes Act in 1917. This act provided the first form of categorical financial support to local programs of vocational education transmitted through State channels. During the years which followed, a number of Federal laws have been enacted relating to vocational education. Because constitutional provisions place the control of education with the several States, all of these laws include certain common features which respect this relationship. Federal legislation has not only helped to finance the program of vocational education in the United States–it has also established priorities of service and standards of service, and has tended to shape the nature of State and local programs in important ways. Federal legislation continues to exert a strong influence upon vocational education, and this makes it necessary that those who plan and conduct programs of vocational education be acquainted with the purposes and provisions of the major laws which affect local programs.

THE RATIONALE FOR FEDERAL INVOLVEMENT

The need for the Federal government to lend support to vocational education stems basically from the general welfare provisions of the Constitution. The economic well-being of the nation is an important concern of all its citizens, and an effective program of vocational education contributes to the nation's economic welfare. Trained and effective workers are essential to economic and social progress. Further, vocational education can represent a vital force for the national security, because the national defense depends as much upon a competent, well-trained work force as upon any single element in the total defense system. In two major wars, but especially during World War II, vocational education has amply demonstrated its capacity to serve the nation in time of crisis. Its peacetime contributions to the nation are even more valuable. It is not difficult, therefore, to understand the concerns of the Federal government in the extent and quality of vocational education.

FEDERAL-STATE-LOCAL RELATIONSHIPS

Under our government structure, the chief responsibility for education has always rested with the individual States. Within the States, there has been a strong tradition for keeping the operation of educational programs, and much of the decision making, under local control. These legal and traditional provisions have been recognized in all Federal vocational legislation.

The role of the Federal government has been that of stimulation, encouragement, leadership, and the maintenance of quality standards, working through the State education agencies. The State agencies have assumed the responsibility for program development and direction, in cooperation with the local schools, which have generally initiated and operated the actual programs of instruction.

THE STATE PLAN

The means for conducting this interrelated Federal-State-local program has involved the State plan for vocational education. This concept was embodied in the Smith-Hughes Law, and has been a significant feature of most subsequent vocational legislation. It provided that each State which desires to share in Federal funds shall submit to the Federal authorities a plan describing the details of operation of all such programs to be conducted in the State. The plan must meet the minimum standards established by Federal guidelines, which conform to the provisions of the Federal legislation. When the plan has been accepted at the Federal level, local schools may develop and conduct programs of vocational education under the terms of the plan, in cooperation with the State education agency, and may be financed in advance or reimbursed from Federal funds under the terms of the plan. The arrangement is intended to assure the quality and effectiveness of the programs so approved. The matching of Federal funds with State and local funds is also involved.

LEGISLATION AND THE LOCAL PROGRAM

It is important for local educational leaders to be well informed about the principal features of the various Federal laws through which their programs may be financed. Although the enforcement of the legislative provisions is primarily the function of the State education agency, local officials need to be aware of the effects of such legislation on their programs in order to carry out their own responsibilities properly.

For many years after its passage, the Smith-Hughes Law remained the major piece of Federal legislation relating to vocational education. In time certain additional acts increased its scope somewhat. In recent years, however, a number of important Congressional enactments have brought new support and new responsibilities to the program of vocational education. All, however, have retained the essential elements of the Federal-State-local cooperative arrangements for the operation and financing of programs.

MAJOR LEGISLATION AFFECTING VOCATIONAL EDUCATION

THE SMITH-HUGHES ACT

This pioneering piece of legislation, passed in 1917, provided the first major stimulus for vocational education from the Federal level. It did so by granting Federal funds to the States in order that the States, in turn, might encourage local programs, and by setting goals and standards. Three major occupational areas were recognized and supported in the law–agriculture, trades and industries, and home economics. Minimum requirements for students, teachers, instructional time allocations, and administration and supervision of programs were included. Funds for the preparation of teachers, and for conducting studies and research were authorized. The matching of Federal funds with State and local funds was a requirement of the law, in order that all three levels of support would be involved. Under supplementary legislation, the funds appropriated increased slowly over the years and helped the program to grow and to expand its services.

With some modifications and amendments this basic law remains in force today, although more recent legislation has supplied larger Federal grants. The Smith-Hughes Law has constituted a model for subsequent legislation, with respect to several of its important features.

THE GEORGE-BARDEN ACT

Congress in 1946 enacted the George-Barden Law as an amendment to the George-Deen Act of 1936. This added to the allotment of funds to the States to support training for distributive occupations–that is occupations in the areas of marketing and distribution. Such occupations had not been included in the Smith-Hughes Act. These funds were limited to the support of programs in which part of the learner's time was spent in actual employment in a distributive occupation.

The George-Barden Law also authorized the expenditure of funds to assist two youth organizations directly related to agricultural education–The Future Farmers of America and the New Farmers of America. In addition, it provided that funds could be used to develop and support vocational guidance activities.

This law, as subsequently amended, is still in force, and funds appropriated under its authorizations are available through State channels to assist in financing local programs. One of the amendments requires that ten per cent of the annual allotments for home economics education must be used only to fit persons for gainful employment in occupations involving knowledge and skills in home economics subjects.

A further amendment to the George-Barden Act, passed in 1956, was known as the Health Amendments Act. It authorized funds to be distributed to the States for the training of practical nurses and other health occupations. This provision has stimulated the establishment of very successful programs in this important field throughout the nation.

Another 1956 amendment of the George-Barden Act authorized funds for vocational education for fishery trades.

THE NATIONAL DEFENSE EDUCATION ACT

In 1958 Congress passed the National Defense Education Act. As the title of the act suggests, the Congress was persuaded that improvement in the quality of elementary and secondary education was essential to the national security, and the act allocated funds to the States to be used to upgrade certain specified areas of the instructional program in the schools. The act, with subsequent amendments, continues in force at the present time. The principle of the State plan which was found in the Smith-Hughes Act, and which allocates funds to each state on the basis of a submitted and approved plan is a part of the National Defense Education Act.

Funds provided under several of the titles of this act can be of assistance to programs of vocational education, but two titles are of particular importance. One of these is designed to strengthen guidance programs in the schools. Title VIII of the Act authorizes funds to support area vocational education programs although the support is limited to preparing workers for highly skilled and technical occupations. The quality and the success of programs of vocational education depend heavily upon good counseling and guidance for those who must arrive at an occupational decision and, therefore, any improvement in guidance services is of special value to those who conduct vocational education programs.

THE MANPOWER DEVELOPMENT AND TRAINING ACT

Early in 1962 the Congress passed the Manpower Development and Training Act in response to a high rate of unemployment in the nation and the continued threat of technological displacement of workers. It provided funds for research into problems affecting employment and unemployment. Studies and demonstration projects completed under this act have already proved to be of much value. Most of the funds, however, are intended for the training and retraining of unemployed workers so that they can secure jobs. This Act is jointly administered by the United States Department of Labor and the Department of Health, Education and Welfare.

The law designates the Employment Security Division of the United States Department of Labor, through its State branches, as the agency to determine the need for training, to refer persons for such training, and to make job placements upon the completion of training. Training is conducted by the local school systems, community colleges and technical institutes, with the major portion of cost borne by the Federal government. Funds can be supplied to the training agency for the rental of space and the purchase of equipment. All salaries and other costs of instruction are met, and trainees are paid a stipend during the training period. Amendments subsequent to the original act have placed greater emphasis upon the training of unemployed youth by reserving larger portions of the funds for this purpose.

The Manpower Act also provides for employers to be reimbursed for training untrained workers on the job under contracts worked out with the Department of Labor. When this is done the vocational school is often requested to provide instruction in related theory to the trainee.

THE VOCATIONAL EDUCATION ACT OF 1963

This Act is in many ways a major landmark piece of Federal vocational legislation if we consider the Smith-Hughes Act as the first. It retains the Federal-State relationship established by the Smith-Hughes Act and requires a State plan to be submitted and approved in order for a State to qualify for financial grants. In many other ways, however, this act plows new ground and departs from the approach of the Smith-Hughes Act.

In drafting this act, the Congress recognized that it is no longer wise or possible to specify legislatively the particular occupations to be included in the vocational education acts. This is a departure from all previous legislation. The law permits funds to be used to prepare persons for any recognized occupation, including business and office occupations, excluding only occupations which are considered to be professional or which require a baccalaureate or higher degree. It approves courses at the secondary and post-secondary level, and specifically includes courses in community or junior colleges, area vocational schools and comprehensive high schools. It permits the use of grant funds for the construction of buildings and the purchase of equipment when matched with State and local funds. It requires States and localities to develop cooperative arrangements with the public employment agency in deciding upon occupations for which training is to be given, and in providing vocational guidance and counseling. By amendment of the Smith-Hughes Act, the requirement that half of the instructional time to be devoted to practical, productive work has been eliminated for certain kinds of occupations.

The 1963 Act centers upon people in need of vocational education rather than upon areas of occupational life. It states that among those to be served are persons attending high school, persons who have completed high school, persons already at work, and persons who have academic, socio-economic or other handicaps which prevent them from succeeding in regular programs of vocational education. Funds are also provided for teacher education, curriculum development and program evaluation.

A most important provision of this law is the allocation of significant sums of money for research and for experimental, developmental and pilot programs aimed at improving the scope and quality of vocational education services. This has already stimulated a large body of research covering many aspects of vocational education, and much of this is certain to be reflected in more innovative and more effective programs.

The Act requires that State and local programs be subjected to periodic evaluation for relevance and quality, and that a national evaluation of the program be conducted by a special ad hoc commission at five year intervals.

Another section of the 1963 Act, which is of special interest to local officials, provides funds to compensate students for part-time work activity under its work-study provisions when such students may require some income in order to enroll in or remain in an approved vocational program.

The annual grants to the States authorized under the Act are considerably greater than any which have previously been available. In every respect it sets new, broader, and higher goals and expectations for the program of vocational education.

THE HIGHER EDUCATION FACILITIES ACT

Another law passed by Congress in 1963, known as the Higher Education Facilities Act, includes financial assistance to community colleges and technical institutes. The funds supplied by this Act are applied to the construction of facilities, such as classrooms, laboratories and general instructional quarters, and in this way they add to the resources available for the support of programs of occupational education at the post-high school level.

THE ELEMENTARY AND SECONDARY EDUCATION ACT

Educational history was written in 1965 with the passage and approval of the Elementary and Secondary Education Act. This is the first major law to supply substantial Federal monies to strengthen and improve elementary and secondary education in the States and the local areas. It is possible for vocational education at the secondary level to benefit from these funds in a variety of ways, as a part of the total program of secondary education. Among the needs which can be met, and which may relate to programs of vocational education are the following:

Provision of supplementary instructional materials.
Provision of curriculum materials for the disadvantaged.
Provision of programmed instructional materials.
Early identification of dropouts.
Provision of increased guidance services.
Employment of school-job coordinators.
Offering of work experience programs.
Provision of textbooks and library books.

In addition, the Act provides major funding for research and for pilot and experimental programs. Under this title several Research and Development Centers have been established, together with a national network of Regional Educational Laboratories, to conduct research, to disseminate findings, and to sponsor pilot and experimental programs. Although the Vocational Education Act of 1963 carries important funds for research, local vocational leaders should not overlook the possibility of sharing also in research funds from the Elementary and Secondary Act through participation in the activities of the Regional Laboratories.

THE APPALACHIAN REGIONAL DEVELOPMENT ACT

In 1965 the Congress passed the Appalachian Regional Development Act for the purpose of stimulating the economic growth of those States and areas of States designated as the Appalachian Region in the eastern United States. Under Title II-B of this Act there is an authorization for special grants of Federal funds for the construction of school facilities for vocational education. These funds are over and above the grants available under the Vocational Education Act of 1963 or other Federal acts. School officials in this region should find these grants to be a useful supplement to other Federal support to which they may be entitled.

THE PUBLIC WORKS AND ECONOMIC DEVELOPMENT ACT

This Act was also passed in 1965 in order to help areas and regions of substantial and persistent unemployment and underemployment to plan and finance their economic development. The law permits Federal grants and loans for a variety of activities intended to improve the economy of such regions, and some of these funds could be sought and used, under the terms of the law, for the development of facilities for vocational training.

THE NATIONAL VOCATIONAL STUDENT LOAN INSURANCE ACT

The purpose of this 1965 Act of Congress is to increase the availability of loans to students in need of funds to pursue approved programs of vocational education. This is done by the appropriation of Federal funds to strengthen the reserves of State and nonprofit loan insurance programs so that more loans may be available to vocational students, and to pay a portion of the interest of loans to such students. Only students in approved post-secondary programs of vocational education are eligible for benefits under this law, and loans are limited to one thousand dollars per student per academic year. Vocational educators may find these student loan arrangements most helpful for certain students who would otherwise be unable to complete a vocational course.

THE FITZGERALD ACT

There is an additional piece of Federal legislation which has implications for local programs of vocational education although it is a labor law rather than an education law. This is the Fitzgerald Act of 1937 which established a program of apprenticeship on a nation-wide basis. Acting under this law the Secretary of Labor has developed procedures and standards for the training of apprentices in cooperation with the states. Local education officials are involved in this program because of the need for instruction for the apprentices in laboratory and classroom subjects related to various apprenticeable occupations. Field workers from the Bureau of Apprenticeship and Training of the United States Department of Labor and representatives of the State apprentice training agencies in the various States are prepared to work with local schools in planning and conducting such courses. The school's responsibility consists of providing the related instruction.

STATE LEGISLATION AND ITS IMPORTANCE

Up to this point we have been discussing Federal laws passed by the Congress, and affecting all the States. In addition, all States have legislation passed by State legislatures which governs many aspects of vocational education within the individual States. The laws vary considerably from State to State, and reflect the wishes of the people of the State, as well as the ways in which educational needs and arrangements differ among the States. In every State, however, the State laws relating to vocational education have an important impact upon the organization and operation of vocational education at the local level. Stemming from the laws adopted by State legislatures may also be various regulations and requirements established by the State education agencies. Local education officials need to be well informed about the provisions of all State laws and State education regulations which affect local programs of vocational education. Such information is always available from appropriate offices of State government.

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Chapter IV

THE GOALS AND PURPOSES OF VOCATIONAL EDUCATION AT THE LOCAL LEVEL

Although much valuable and necessary assistance is supplied from national and State levels, it is in the local school district and the local school where vocational education actually takes place. This is where the teaching occurs and where the benefits of the program finally reach those for whom they are intended. It is therefore especially important that persons directly responsible for this education at the local level have clear concepts of their goals, a comprehensive understanding of their task, and an appreciation of the value of vocational education.

PROGRAM GOALS AND PURPOSES

The fundamental purpose for conducting a program of vocational education is to enable those who enroll in it to enter and maintain themselves in useful, gainful employment. The results of the program are ultimately measured by the extent to which this is accomplished. This goal, however, goes considerably beyond the acquisition of technical competence for the first job. It includes the mastery of those skills–technical, social, adaptive and conceptual–which will enable the individual to profit from on-the-job learning and to grow and mature as a worker. He must also be prepared to meet successfully the demands for change and renewal which future occupational developments will require. By satisfying such needs for the individual, the manpower resources of the nation are continually improved and a healthy economy is made possible for the benefit of all.

A COMPREHENSIVE PROGRAM

To serve its community well, a program of occupational education at the local level must be comprehensive in scope. This means that it must be inclusive in terms of occupations, in types of service, and in the people it reaches. Although a local program should not fail to reflect the nature of the local economy and its job market, it must also take into account regional and national job trends. The population of the nation is increasingly mobile, and it is not in the best interests of the future worker to restrict his preparation entirely to specializations which are peculiar to a local demand.

AN EDUCATIONAL EMPHASIS

It is of great importance that those who plan and direct the occupational aspects of education perceive their task as that of education, and not as training only. This means a full awareness of their role as a contributor to the total education of the individual, not solely as a specialist concerned with training in technical skills. General educational development and technical vocational skills are both essential components of occupational success. Furthermore, it is clear that systematic preparation for sound vocational choice is a necessary foundation on which to erect any structure of vocational education. Therefore, effective guidance and counseling assume a place of major importance in every program. Vocational education personnel must share equally with other educators in making certain that the necessary vocational guidance is provided.

THE JOB INTERESTED STUDENT

In every high school there are a significant number of students who, for reasons of interest and aptitude, desire to get jobs when their high school education has been completed. Vocational education has always appealed to this type of student as the best way to achieve his educational and occupational goals. Programs in high schools clearly must be designed to satisfy the needs of these young people, both boys and girls.

Many in this group have the ability to pursue work beyond high school and studies have shown that they frequently change their plans and continue their education when the opportunity presents itself. If their vocational education has been broad and well-rounded, and supported by a first rate general education, it is no handicap in their attempt to seek further education. Indeed, for many kinds of post-high school education it is a real asset. However, the vocational program for such students should be open-ended. It should provide the graduate with several options with a major emphasis on decision for job placement.

GROUPS TO BE SERVED

Vocational education should not be looked upon as a panacea for the reduction of the dropout in high school or post high school education. Nevertheless, for some students the opportunity to enroll in vocational courses may tend to prevent early school leaving, and thus permit the potential dropout not only to complete school but to be better prepared for work and for life. Cooperative or work-study forms of vocational education have been found to be especially effective in preventing school dropouts. Work-related courses and activities of a pre-vocational nature may help to meet the needs of other students who are not ready for admission to vocational courses, but may otherwise tend to become early school leavers.

THE HIGH SCHOOL GRADUATE

Many young people complete a high school education but remain undecided about their post-graduate plans until the time when they complete high school. Others are ready to make a vocational choice at some time during the high school years. For those who plan to enter employment immediately following graduation, the school needs to provide sufficient preparation. Schools must also be ready to serve the high school student who graduates without any vocational preparation by making vocational education available at that point in a variety of ways. The familiar two-year programs of the technical institute or community college will be useful for many, but these alone are not sufficient. These institutions or some other, such as the area vocational school, must be ready to offer training to the recent high school graduate in a wide range of occupations in addition to the technical and paraprofessional. The length and depth of such courses need to be highly flexible, designed to fit the requirements of the jobs for which training is given and the needs of students. The trend on the part of young people to continue into some form of education beyond the high school, however brief, is a notable development of recent years, and it is growing.

THE SCHOOL DROPOUT

School retention rates have risen steadily, but for the forseeable future the number of school dropouts in many localities will continue to be significant. These young people, unless helped, have the poorest prospect for satisfactory employment. Many of them learn through hard experience that failure to complete high school has been a mistake. If a favorable opportunity exists, they can often be attracted back to school to pursue a vocational course, and often, at the same time, to complete their high school requirements. However, few of them will return to a program serving regular high school students. Arrangements must be made to meet their needs on a more adult level and an individual manner. Where this is done the returned dropout will often become an interested and successful vocational learner to the benefit of the community as well as to himself.

EMPLOYED WORKERS

Vocational education has always concerned itself with continuing education by conducting courses for employed workers who desire refresher or upgrading education. The share of resources allocated to this kind of training seems certain to increase. We have noted in a previous chapter that one effect of modern technology is to compel most workers to renew their job skills and knowledge more frequently. Local programs of vocational education will need to place this function high on the list of program objectives.

DISPLACED WORKERS

There is another group of workers whose needs will require increasing service from local programs of vocational education. These are the ones whose jobs fall victim to technological and other changes and who must be retrained for new kinds of work. Manpower Development and Training Programs will enroll many such people, but leaders in vocational education should make available whatever additional kinds of training may be required, using whatever resources may be available.

THE DISADVANTAGED

Although vocational education has helped large numbers of youth and adults to achieve success in occupational life, significant numbers of Americans have failed to share in these benefits. They have been unable to do so because of various educational, social, economic and personal handicaps. Vocational education has often been unable to assist them because of the serious deficiencies in their basic education, and sometimes for other reasons. These disadvantaged and deprived people are in special need of the preparation which will permit them to become productive and contributing workers. Vocational education has no more important task to perform than to join with all educators and other professional workers in helping those from disadvantaged groups find a satisfying place in American society.

TYPES OF SERVICE NEEDED

Another way to consider the goals and purposes of a well balanced local program is to think of the areas or types of service which should be available. This would include all forms of pre-employment training, whether for high school students, high school graduates, school dropouts, displaced adult workers, or those who are disadvantaged or handicapped. It would involve cooperative types of education where the learner is a student at work, and also where the learner is a worker at school, as in the case of apprentices. Another area of service which would be found is supplementary or upgrading training for employed workers. The mutually supportive roles of career guidance and vocational education must be recognized in determining the goals of an adequate program.

A COMPREHENSIVE PROGRAM

To be fully comprehensive, a local program should satisfy for the people of the local area all of the needs which have been described in this chapter. A program is not complete and comprehensive unless those who are responsible for it also assume a joint responsibility with guidance personnel for adequate vocational guidance and counseling, and for job placement and follow up of graduates. A comprehensive program also incorporates the area of the practical arts into the total program of education so that the exploratory, guidance and readiness values of the practical arts can make their important contribution to occupational choice. A well-balanced program will provide opportunities in the following categories, as well as others which may be needed to satisfy special local needs:

Practical Arts–

Those phases of agriculture, business education, fine arts, home economics and industrial arts which relate closely to occupational life but which do not have occupational efficiency as a major goal.

Industrial Arts–

Instructional shop and related work of a non-vocational type, centered around the industrial and technical aspects of life today, and providing exploratory experiences which are helpful in vocational choice.

Home Economics–

Home economics education is a program of instruction which helps youth and adults meet the responsibilities of home and family life as well as prepare for employment and for the dual role of homemaker-wage earner. It is designed for persons who have or will have homemaking responsibilities and/or who have entered or are preparing to enter gainful employment in an occupation involving knowledge and skills in home economics.

Education designed for persons who have entered upon or are preparing to enter upon the work of the farm or farm home, or any occupation involving knowledge and skills in agricultural subjects, whether or not such occupations involve work of the farm or the farm home. Some of the specialties related to agriculture, such as horticulture and greenhouse work, may be found in the vocational programs of urban as well as rural areas.

Trade Education–

Instruction designed to develop basic manipulative skills, safety judgment, technical and related knowledge in industrial occupations. Although centered largely in the occupations such as the craft trades and manufacturing, the program also includes a growing number of service-type occupations.

Office Education–

An educational program which prepares the student for initial employment and advancement in office occupations. Concentration is usually upon office and clerical skills and related knowledge.

Distributive Education–

A program of instruction in the selling, marketing and merchandising of goods and services for those who have entered or those who are preparing to enter distributive occupations.

Technical Education–

Education for occupations in which the worker depends largely upon technical information and the laws of science, mathematics and technology to accomplish his work. The technician functions in modern design, production, construction, distribution and service.

Health-Related Occupations–

The introduction of the practical nurse training program was the beginning of the preparation for a number of health-related and para-medical occupations. Training for nurses aides, hospital orderlies, medical secretaries, medical technicians, dental laboratory technicians, and similar kinds of jobs has become a part of many vocational programs at both high school and post-secondary levels. The number of occupations in this group seems certain to increase.

Interrelated Occupations–

Many kinds of jobs are emerging in the labor market which involve skills and knowledge associated with more than one of the traditional fields of vocational service. Combinations of health technology and clerical and secretarial skills are found in several occupations. Aspects of office and distributive education need to be combined with technical knowledge in agriculture for another group of jobs–the agri-business combination. These cross disciplinary kinds of training will undoubtedly tend to become more common as time goes on. Vocational leaders should be on the alert to sense such needs and to provide for them in their programs.

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CHAPTER V

PLANNING THE LOCAL PROGRAM OF VOCATIONAL EDUCATION

One of the continuing functions of leadership in programs of vocational education is the planning function. Without successful planning a program drifts into a state of ad hoc decision making without recognized goals or purposes, and neither the community nor the staff will find such a process satisfactory. It is not possible to maintain staff morale or a sense of direction in an enterprise which appears to be governed by expediency, or which seems to be out of touch with the realities of the world of work. Lack of planning usually results in a status quo program which becomes more and more inadequate as time goes on, and may eventually have to be completely reorganized.

There must be planning in order that there may be goal setting, and there must be goal setting in order to provide direction and to permit periodic evaluation. Evaluation, in turn, leads to re-assessment, and often to the modification of practices and goals. To keep a program productive this process must be continuous.

THE BASIS OF PLANNING

Programs should be planned upon the basis of demonstrated need. Public support for a new and growing program depends upon the ability of educational leadership to identify and describe needed areas of service and to produce evidence to substantiate such needs. The public is often less able to recognize need for change in an established program, however, and will sometimes continue to support an ongoing program on the strength of its earlier successes, even after it has lost some of its effectiveness and its relevance to changed conditions. Vocational leaders have a professional obligation to inform the public through proper administrative channels to boards of control when aspects of the program show diminishing need or effectiveness, and to make recommendations for change and modernization.

LEVELS OF PLANNING

Vocational planners must be able to project plans of two types–short term and long range. They must propose programs, policies and procedures which will meet current needs of people for vocational education. At the same time they are required to assess economic, social and educational trends with sufficient clarity to anticipate and meet long range goals and needs. This is one reason why they must be students of economic, social and political processes, particularly those which influence the work world and public policy. One who is capable of judging long-range prospects and probabilities will not foreclose future options by accommodating too completely to short-range or immediate considerations. Sound planning of a local program will take account of both immediate needs and future developments and will provide for the flexibility to adjust to both.

It is clear, for example, that the commitment to certain national goals, and the priorities given to these goals, will influence manpower needs and occupational demands. For example, projections made by manpower economists suggest a low national growth rate in the next decade in some of the building trades occupations. Yet if a shift in public policy should place a high priority on more and better housing and a social goal needs for such workers could increase considerably. Vocational leaders must keep abreast of policies which affect the job market, and take account of them in long-range planning.

INVOLVING OTHERS

If others are expected to play a positive role in carrying out programs that have been planned, they must be involved in all stages of the planning. The planning of a local program of vocational education is not a task for vocational educators alone, nor indeed for educators alone. All groups and levels of the professional staff of the school system need to be involved. So also must the community be involved as a whole and as represented by its special interest groups. This means particularly the spokesmen for business, industry, labor, and any others who have a relationship to employment. It means many social agencies and agencies of government in the community. It means the parents and civic leaders and political officials. The success of a local program depends very much on the extent to which the local vocational administrator can establish himself as a respected leader in the judgment of all these groups, and secure their assistance in program planning and operation.

It is a serious mistake for the vocational administrator to develop plans for a program by relying largely upon his own experience and thinking, and then attempt to "sell" his plan, or have it ratified by those who will have to activate and support it. Planning, of course, has to go through stages, and a considerable input by the administrator is often needed in the first, tentative formulation of plans. Early in the planning process, however, all of those who will later be affected by the plan should be brought in as genuine participants so that they will recognize that they are real contributors to the process.

STAGES IN PLANNING

Planning must be based upon reliable facts. The facts required for planning a program of vocational education are those which will show whether a need exists for such a program. If such a need is established, data must be secured to determine what groups of people need to be served for what occupations, and in what numbers. At this point initial planning can be undertaken, additional data secured, and refinements and details developed so that a proposal can be put before the school authorities and the community. The procedure is essentially the same whether a program is being introduced in a community which is without one, or an existing program is being extended, expanded or modified. The raw materials of planning are facts.

The fact finding process may include a community survey, and Chapter IV describes this procedure in some detail. There are numerous other sources and resources which the local administrator may use in gathering the information which is needed. These are also mentioned in Chapter VI and in Chapter VIII.

PREPARING THE PLANS

The final stage in planning consists of preparing a working proposal, and taking the proposal to the school authorities and the public, well supported with facts and documentation. Such a proposal, or plan, must show the rationale which underlies it, the details of program structure, the phases of development, time tables, costs, anticipated benefits, and plans for periodic evaluation and adjustment of the program.

GAINING COMMUNITY SUPPORT

When plans for a program are to be translated into action, the approval of the community must be secured. Of fundamental importance in achieving this is that proposals be based upon demonstrated need and that the plans proposed be sound, educationally and financially. Support comes more readily when the public has shared in the planning, at least to the extent of being informed of major issues and suggestions which are under consideration as the planning proceeds. In addition, opportunities should be provided for the expression of public reaction during the planning process as well as at the point when final proposals are presented. The ability to attract both internal and external support—that is, support from the professional school people and also from the general public—for a sound program of vocational education is a real test of the competence and leadership of the vocational educator.

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Chapter VI

DETERMINING THE SCOPE AND NATURE OF THE PROGRAM

The study of a local area is a form of research which, like most research, can provide many of the facts which are needed for program planning and program improvement. It attempts to answer some of the questions which present themselves when decisions are about to be made concerning the establishment of a vocational education program or the assessment of an existing program.

VALUES OF A LOCAL STUDY

Information secured from a survey can help to determine whether a community is justified in attempting to develop and support a program to serve its own citizens, or whether it would be wiser to establish a program on a shared basis with other districts or schools. A major purpose of a study of this kind is to reveal the extent and nature of need. The findings are also very useful in deciding how needs that are identified can be met. Studies are valuable not only when moving into a new program of vocational education, but also as a means for continuous planning and revision of established programs, so that obsolescence may be avoided. Fundamentally, such studies are designed to discover the kinds and numbers of jobs in the community, and the employment trends, so that the annual need for new workers in various occupations can be estimated. The needs of employed workers for upgrading and updating also must be studied, and many other facts ascertained so that reasonable projections can be made. Population and student enrollment projections must also be made. The data serve a useful function, not only in planning for instructional services, but also for the purpose of vocational guidance and counseling.

A well conducted survey has the additional advantage of becoming a public relations device by the involvement of many segments of the public and through the attendent publicity and public interest which it stimulates. The dissemination of the findings should be widespread and fully informative. Thus the survey can become a means for achieving community understanding and community apporval of the steps necessary to create the programs which are proposed as a result of the survey. The effectiveness of the study will be in proportion to the amount of community involvement.

A community study which does not lead to positive developments is of little value. The study can help in deciding what direction the developments should take, but it is no substitute for action. Those who conduct it should do so with some prior assurance of sufficient community interest to make the introduction or restructuring of a program, in terms of the survey findings, a strong possibility.

ORGANIZING AND CONDUCTING THE STUDY

When a community or area study is to be of a large scale, formal type, it needs to be carefully organized and structured, properly staffed and financed. Several States have encouraged local areas to carry out such studies, and have made available funds from Federal and State sources to finance them. They have also furnished personnel to serve as consultants and advisors to the local people engaged in the study. It is always wise for local vocational leaders to consult with vocational officials in the State education agency before launching into a major study. Resources and guidance may be available which would otherwise be lost.

THE STEERING COMMITTEE

As in any worthwhile research, there should be, at the outset, a clear concept of the purpose and scope of the study. It is well if this can take the form of a clear, concise statement which is drafted to describe what the study is intended to examine, and what kinds of decisions are to be based upon its findings. For this, and to guide the overall conduct of the study, it is useful to create a steering committee, composed of professional educators and lay personnel. Membership on this committee must be carefully determined. Representation is needed from school administrators, vocational education specialists, guidance specialists and general educators. From the lay public, representatives of business employers, organized labor and the State Employment Agency should be among those included. One or more members from the general public, often members of boards of education can be helpful. Community college personnel should be on the steering committee. Since they will be so influential in the acceptance and implementation of a program, the chief school officers of the area should have some or all of their number on the steering committee.

THE EXECUTIVE COMMITTEE

Quite clearly the steering committee will be quite large. This is necessary if the study is to have the benefit of advice and planning from all segments of the educational and general community. Such a committee can meet only periodically, and is too large to conduct the detailed planning and the day to day operation of the survey during the time it is in progress. The steering committee should select its own chairman, and should also proceed to designate members of an executive committee which will carry on the active processes of the study. This will be a much smaller committee with power to proceed with the study which, however, should be developed and endorsed by the steering committee before any active steps are taken. The steering committee, with the assistance of the executive committee, also develops and approves the budget and the selection of a study director and staff.

THE STAFF

For such a study the services of a full time study director are usually needed during the planning period and for the duration of the study. This person should be carefully selected on the basis of his knowledge of research and survey techniques and he should have had previous experience in conducting such surveys. Sometimes such a person can be found on the local educational staff and can be released to act as the survey director. At other times it is necessary to seek a person from a university staff or from some other source. It is important to secure a well-trained, competent individual who can provide leadership and who can perform all the necessary tasks, including the drafting of the final report.

In order to collect the required data it may be necessary to employ part-time personnel to do the field work. A survey usually requires interviews with many selected individuals, and other means of data gathering which call for many man hours of field work. Some of this may be provided by the release, part time, of some school personnel from their regular duties. In addition, other qualified persons in the community can be employed, and are usually quite adequate if given a brief period of training for the task.

Sufficient secretarial and clerical personnel will be needed by the director, and some statistical service may be required.

SPECIAL ADVISORY COMMITTEES

It may be found necessary to create certain ad hoc advisory committees to help with certain aspects of the study. Examples of these might be a group selected by the personnel directors' organization in the community, the community health service's representatives, or the community planning board. Such special committees are to assist the staff in studying the employment needs in the kinds of occupations they represent.

FINANCING THE STUDY

A comprehensive community occupational survey costs money, and the arrangements for financing it should be carefully worked out. A realistic budget should be prepared and the sources of financial support determined and committed in advance. Good accounting procedures should be followed with a post-audit at the completion of the study.

It has been pointed out that a community survey may be financed in part by vocational education funds. Local school districts may contribute by an assessment based upon the number of its pupils, or on some other formula. Local schools can also contribute the time and talents of personnel. Sometimes business and industrial organizations have given financial assistance to such studies, and they may also make the time of certain of their personnel available to the survey director.

KINDS OF DATA

A community survey relating to vocational education usually seeks the answers to many related questions. Some of them are:

What occupations in the area will require workers who can be prepared in the schools?

How many are needed annually?

What are the projections for the future?

What are the relationships of the jobs in the occupational field?

How do these relate to regional and national trends?

How many students will need to be served?

What age and grade levels are appropriate for courses intended to meet the occupational opportunities?

What are the current and projected needs for vocational training opportunities for out-of-school youth?

What are the needs of employed workers?

What are the needs of workers displaced by technical and other changes?

What are the attitudes of prospective students toward enrollment in vocational courses?

What are the attitudes of adults?

What are the attitudes of administrators and teachers of general education?

What are the attitudes of guidance personnel?

What are the attitudes of business and industrial leaders and other employers?

What are the attitudes of labor?

What are the attitudes of the general public?

To what extent are trained workers available from sources other than the schools?

The primary task of the survey is to secure the facts upon which program decisions can be made. There are three commonly used methods for obtaining the basic data.

METHODS AND SOURCES FOR SECURING DATA

Community surveys usually make use of the written questionnaire, the structured interview, and the analysis of relevant existing data.

The questionnaire is a widely used research device. In a vocational educational survey it can produce data from workers, employers, students, parents and other adults. Its preparation and use, however, need to be carefully controlled if the information is to be non-biased and reliable. Experienced researchers know how to produce useful questionnaires, and there are numerous references available on this subject.

A written interview guide is also an instrument which needs to be prepared with care and used with skill in a structured interview. Training in the interview technique is advisable. The interview can be used to secure data from employers, labor officials, school personnel, students—in fact any desired group. The resulting information can be used in various ways, including that of verification of data obtained by other methods.

Many sources of data which have already been collected exist in most communities and should be used. Local and State employment agencies have a great deal, and it should be fully utilized. Chambers of commerce, trade, manufacturing and business associations, professional associations, labor unions, and public planning agencies are good sources. Public utilities make important studies and projections. Census data are available. Economic studies and forecasts are made by many agencies. The United States Departments of Labor and Commerce conduct many general and special studies, and will readily supply the findings; and many States maintain similar services at the State level. All available sources should be used to increase the accuracy of the findings.

DISSEMINATING THE FINDINGS OF THE STUDY

When the study is a major one, it should result in a well-written, published report. The report should contain a description of how the study was conducted, what data were secured and by what methods, what the data revealed, and conclusions and recommendations for program. A sufficient number of copies should be produced to permit widespread distribution. Among those who should receive the report are all members of the steering committee and advisory committees, all school personnel in the area, all members of boards of education, and members of governing boards of community colleges, colleges and universities in the community. Copies should be supplied to officials of local government, and to appropriate officials in State government. All groups and agencies which have contributed to the findings should be provided with either the full report or an abstract, prepared in shorter form.

The public can be reached through the news media, and these media should be kept informed of the nature and progress of the study from the beginning. A copy of the final report should go to the press, radio and television news services in the local area.

The purpose of the widespread dissemination of the survey report is twofold. One is to recognize the efforts of the many individuals and groups who have contributed to the study. The second is to create an understanding of the needs in the community for vocational education and to enlist community support for the plans which have been developed to meet them.

THE NEED FOR CONTINUING STUDY

Technological and related changes occur too rapidly in these times to permit programs of vocational education to operate for very long upon the results of a single survey. A survey may be likened to a photograph of the occupational status and needs of a community at a given time. The details in the picture, however, are undergoing constant change. This means that the educational planners must provide for, in effect, a continuing study. They are required to be constantly alert to the elements of change. They need to make use of early warning systems which signal impending occupational changes, know when the changes have arrived, and make the necessary program modifications promptly. Fortunately, sources which are available as warning devices are increasing in number and in predictive sensitivity. The vocational administrator must know what the sources of such information are and how to use them.

It has already been pointed out that programs of vocational education cannot be planned entirely in terms of local employment needs. With the present availability of transportation, a labor market is likely to be regional, and even national, rather than local. The vocational program must be as concerned about those who commute as about those who will remain in the community. This is the reason why regional and national employment trends, as well as local needs, should be taken into account when vocational programs are planned.

INFORMAL STUDIES

It is not always necessary to carry out a formal, highly structured study of the comprehensive type in order to secure information for certain kinds of decisions relating to vocational programs. It often happens that the decision affects only a part of the program—for example, the introduction of a new occupational area. For such purposes there is no need for the extensive organization, field work or full time staffing that are desirable for the more complete community survey. Such informal studies can usually be planned and conducted by members of the regular school staff under the direction of the vocational administrator. It is important, however, that the person directing the study understand the techniques of research and the survey method of research so that the data gathering analysis may lead to valid conclusions.

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Chapter VII

THE EFFECTIVE USE OF ADVISORY SERVICES

ADVISORY COMMITTEES

The practice of turning to advisory committees of lay citizens for assistance in conducting an educational program has been common in the field of vocational education throughout its history in the United States. Indeed, it may be said that the idea of citizen advisory committees originated with the vocational education movement, although it has now been adopted in many schools and school systems in relation to the general and academic programs as well.

Because vocational education has goals that involve preparation for the world of work, from the beginning it has been found necessary to turn to those who represent the occupational world for advice and information concerning the nature and content of the program. If the instruction is to be functionally related to occupational conditions, the need for some sources of current information is clear. The advisory committee has proved to be a valuable adjunct to the vocational program for this purpose.

In some States such committees are mandated by law. Whether mandated or not, the school which plans to offer vocational courses should use advisory committees in its planning and in operating its program.

Advisory committees can and do contribute to the program in a variety of ways. In addition to identifying training needs, they can assist in keeping the program coordinated. They can provide information for keeping instructional content current. They can often help in recruiting competent persons as teachers, particularly for adult extension courses. They can be of help to teachers in service. They can play an important role in the job placement of graduates. One of the most valuable contributions of an active advisory committee is the building of respect and prestige for the vocational education program. In this way, advisory committee members become an important public relations asset.

Expert knowledge and advice can be obtained from sources other than advisory committees, and the vocational administrator should tap all available resource personnel to keep the vocational program continually related to changing needs and to new educational and occupational developments.

THE GENERAL ADVISORY COMMITTEE

When a comprehensive program of vocational education is to be undertaken, a standing general advisory committee should be formed. It is best for such a committee to be formally appointed by whatever official body is responsible for the program. The advisory committee should consist of an odd numbered group of members, typically five or seven. A committee which is too large tends to become unwieldy. Its members should be broadly representative of three groups in the community–employers, organized labor, and the general public. It is usually best to have equal representation of employers and labor in the membership. Members should be invited to serve after it is ascertained that they truly represent their groups and are willing to perform the services required. Upon acceptance they should be officially appointed for fixed terms of office. The terms should be staggered so that there is continuity as well as change in the membership as time goes on. Suitable recognition should be given to those who serve on such committees.

The general advisory committee has the responsibility for advice to the vocational administration and the governing board concerning general, overall educational policies as they relate to vocational education. It advises as to the types of vocational services needed, the development and maintenance of the program, including the vocational guidance program. This committee should share in periodic program evaluation and, in general, represent the community in helping the school to maintain a program which fully meets the community's needs.

SPECIAL OR SUPPLEMENTARY COMMITTEES

Additional advisory committes can be used to advantage to serve particular vocational departments or program areas. Committees to advise the school on the home economics program, the agriculture program or the distributive education program are examples of this.

Occupational and craft advisory committees are used widely in the operation of successful programs. Such committees advise on matters pertaining to the instruction in a particular occupational field. Advisory committees for practical nursing, office occupations, carpentry, and printing, among many others, are examples. These subcommittees, like the general advisory committee, should be standing or continuing committees, with proper arrangements for the rotation of membership and the filling of vacancies.

At times, however, it is helpful to create special or ad hoc committees for certain purposes. Such a purpose might be the periodic evaluation of a program, the study of the need for an additional curriculum, or the preparation of a course of study. Persons who are selected to serve on such committees should know that their services will cease when the purpose of the committee has been achieved.

The vocational administrator will need to work with another kind of committee in connection with the program of apprentice training. This is the joint apprenticeship committee. Reference has been made to this committee in Chapter III, in describing the legal support of the apprentice training program. The joint apprenticeship committee is appointed by the employer and the union representing the trade for the industry or business which establishes an apprentice training program. The vocational administrator works with this committee in arranging for the related laboratory and classroom instruction for the apprentices.

SELECTION OF COMMITTEE MEMBERS

The membership of advisory committees should be determined by the purposes for which the committees are created. A general advisory committee, designed to serve a total program, needs to have members who represent broad major interests. This usually means representation by one or more persons from business and industrial management, and an equal number from organized labor. If the program includes any aspect of agricultural education, recognized agricultural leaders must be included. A representative from the field of retailing is a valuable person to have on such a committee. It is also advisable to have at least one member of the committee who is not identified with any of the interests just mentioned, but who is concerned with the public aspects of vocational education. The committee should select its own chairman.

It is best to secure nominations from organized groups for individuals to represent their interests on an advisory committee. The Chamber of Commerce or similar management group, the labor union council in the community, the agricultural organization, and the merchants association are some of the groups which can be helpful in this matter. Such groups should be asked to nominate more than the number of persons who will ultimately be asked to serve. The school officials and the governing board must then make the final choice of personnel. For a number of reasons, this is a better procedure than to secure advisory committee members by direct invitation of the school authorities without prior consultation with the organized groups; Advisory committees for specific occupations should be chosen in the same way. Different kinds of personnel are sought for such committees–persons whose job responsibilities and experience are appropriate for the committees' tasks.

In all cases it is important for the school officials to discuss thoroughly with the sponsoring groups the purposes of the advisory committee for which members are being sought. This should be done so that they can nominate people who are best qualified for the service to be rendered. When individuals are invited to serve on advisory committees, they too should be fully informed about the purposes of the committee, the responsibilities of membership, and all details which will help them decide whether to accept membership.

THE CLEAR UNDERSTANDING OF FUNCTIONS

It is very important that all who serve on advisory committees understand and accept the role which they will be called upon to fill. They must understand that their function is advisory, not administrative. It must be clear to them that they are contributing from their own experience and knowledge to assist the governing board and the school officials in making policy decisions and in planning details of program operation, but that final responsibility rests with the governing board. It must be understood that it may not always be possible for the board or the school administrators to adopt in full the recommendations of an advisory committee. On the other hand, if such recommendations are frequently ignored, an advisory committee will soon cease to be interested in its task, will revert to inaction, and will ultimately become non-functional.

THE ROLE OF THE VOCATIONAL ADMINISTRATOR

It is the responsibility of the vocational administrator to keep all advisory committees active, responsive and contributing. It is not unusual to find that such committees, once formed, become less and less active, more and more perfunctory in their activities, and end up as paper committees having only a nominal relationship to the vocational program. When this happens it is usually because the administrator has failed to devote the required time and attention to the advisory committees. Keeping such committees functional requires a substantial amount of staff time, but the benefits are commensurate with the time invested.

The vocational administrator or a member of his staff should act as the secretary for each advisory committee. His office should be responsible for all clerical work and record keeping for the various committees. He should send notices of meetings, including an agenda which he has worked out in advance with the committee chairman. He or his secretary should keep minutes, and have them written up and supplied to all members soon after each meeting has taken place.

The vocational administrator will need to play a leadership role in relation to advisory committees, as well as the subordinate role of secretary and follow up agent. Without in any way dominating the various committees, he will find it necessary to initiate ideas, suggest needs, and point out issues which require the attention of the advisors. Advisory groups can react to suggestions and problems much more readily then they can formulate them. Recommendations from the advisory committee should be transmitted through the chief administrator to the governing board.

OTHER ADVISORY SERVICES

Advisory committees are not the only source of advisory help available to the vocational administrator. He should also make use of consultative services which can be provided by individual specialists. These include persons from State Education Agencies and individual specialists from labor, business, agriculture, industry, and the professions. Sales representatives from suppliers of equipment can also be helpful. Consultants from various disciplines related to vocational education are found on college and university staffs, and on the staffs of other agencies. They can often be exceedingly helpful as resource people. Increasingly the vocational educator will need to look to the economist, the sociologist, the social psychologist, the specialist in learning theory, and others for knowledge and advice in planning his program. The alert vocational administrator will seek out and use every useful source of assistance in maintaining a strong program.

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Chapter VIII

VOCATIONAL EDUCATION AND RELATED AGENCIES

In conducting a program of vocational education, it is necessary to maintain cooperative working relationships with a number of public, quasi-public and private agencies. In discussing these relationships, references to public agencies will be to those which are supported by public funds. For the most part, these include various branches of government. Nonpublic agencies are those which are essentially private in character and which do not receive support from tax sources although they may be closely associated with public policy and may have major interests in public vocational education. Business, industry and unions fall in this category.

PUBLIC AGENCIES

A number of public agencies have functions which relate to vocational education and which can be of assistance in the local program. The vocational administrator should be thoroughly familiar with these agencies and their services.

THE STATE EDUCATION AGENCY

The branch of State government which has responsibility for education within a State is usually known as the State Education Agency or the State Education Department. Historically the vocational education division of this agency in most States has had close relationships with local vocational administrators and with local programs of vocational education because it has served as the administrative arm of the State Board for Vocational Education. In all but a few of the States, the State Board of Education has also been designated as the State Board for Vocational Education under provisions of the State plan for vocational education. Because of the Federal-State-local relationships with regard to the disbursal of Federal vocational funds and compliance with minimum program standards, the bonds between State vocational leaders and local vocational administrators have traditionally been strong ones. There is every indication that leadership at the State level will continue to exercise a good deal of influence in the development of local programs of vocational education. Those who administer local programs can look to State vocational officials for much assistance and support.

SERVICES OF THE STATE EDUCATION AGENCY

The State Education Agency renders a variety of administrative and advisory services which guide and assist the local program of vocational education. The local administrator will need to work closely with this agency in maintaining a quality program in his community.

Finance and Standards

The vocational branch of the State Education Agency has the responsibility for approving the disbursal of State and Federal vocational education funds to local schools and school systems and post–high school institutions which are eligible for such support. Allocations must be in accord with the State plan and with Federal and State policies governing the use of such money. The State Education staff is also required to assist the localities in maintaining quality standards in their programs of vocational education. However, the services of the State Education Department go well beyond matters of finance and program standards.

Promotion

Overall leadership in the promotion and development of vocational education within the State is a major function of the State Education Department and its staff. In meeting these responsibilities, statewide policies are developed in cooperation and with the advice of local education officials. The local director of vocational education may find himself involved frequently with decisions and plans relating to statewide policies and patterns of operation.

Teachers and Leaders

Since a successful program of vocational education requires well qualified teachers in sufficient numbers, one of the responsibilities of the State office is to set up the qualifications for the various kinds of teachers who serve in vocational programs, and then to develop arrangements for their professional preparation. In most States the teacher education function is carried out by one or more units of the State University system under arrangements approved by the State office of vocational education. Local administrators usually find the State office very helpful in locating prospective teachers, and in all matters relating to the continuing preparation and the certification of teachers.

In the same way, programs for the training of vocational leaders are frequently conducted with the assistance of State and Federal funds and of State education personnel.

Studies and Research

A service often rendered by the State Education Department provides advice and general assistance in conducting local or area studies of needs for programs and in the planning of projected programs. Since the enactment of the 1963 Vocational Education Act nearly all State Departments have entered into the active sponsorship and support of wide-ranging projects of research, using the funds available under this act. Many States have created special Research Coordinating Units for this purpose. Local programs can benefit from these research activities in two ways. They can improve their programs by making use of the findings of the research which is completed. They can also, at times, secure assistance from funds and expert advice in planning and carrying out research relating to their own programs.

Consultation

State Education Departments can be helpful in furnishing consultative services in relation to new programs as well as to ongoing programs in their attempts to keep abreast of occupational and educational changes. They often have specialists on their staffs who can advise on building design, space arrangements, and instructional equipment, as well as curriculum and instruction. The State office normally approves the nature of facilities which are constructed with the assistance of State or Federal funds, and of equipment which is purchased from such funds. In addition, these offices usually serve as a clearinghouse for a variety of information, such as state-wide occupational needs, which is important to the local vocational administrator in the operation of his program.

EMPLOYMENT SERVICE

Several other State Agencies have responsibilities and perform services which relate closely to the work of the vocational educator. One of these is the State Employment Service. This unit of government has a joint responsibility with the school for the operation of Manpower Development and Training Act Programs. In deciding upon the occupations for which training is to be offered in high school and post–high school programs, the Vocational Education Act of 1963 requires consultation between school officials and officials of Employment Service. The Employment Service can also test and counsel individuals who desire training, provide school administrators with many kinds of economic forecasts and labor market studies, and assist in placing vocational graduates in jobs. The Employment Service is becoming an increasingly valuable source of information and assistance to those who are responsible for programs of vocational education.

APPRENTICE TRAINING COUNCIL

In many States there will be found a State Apprentice Training Council or Agency. These agencies are closely related to the Bureau of Apprenticeship and Training of the United States Department of Labor. Local vocational leaders need to work effectively with State and Federal personnel in their locality who represent the apprentice training function. Enrollment in a registered apprentice training program is an excellent form of job placement for many graduates of vocational courses, and good relationships between vocational and apprentice training leaders help to make this possible. In addition, the vocational program frequently is expected to offer instruction in related technical subjects which are required of most apprentices.

LABOR DEPARTMENT

The State Labor Department is another branch of government whose functions relate closely to the work of the vocational educator. This agency or some similar agency interprets and enforces all laws affecting workers, including the special legislation which applies to young workers. Safety provisions and measures, in vocational schools as well as in industrial establishments become the responsibility of this department. This department also performs many other functions and renders many services besides those of a regulatory nature. The vocational leader will find it very helpful to become acquainted with the services and personnel of the Labor Department in his state and region.

COMMERCE DEPARTMENT

Most States have, as a part of their executive branch, an agency known as the Department of Commerce, or a department with some similar designation. Such departments usually have responsibility for attracting new industry to the State, as well as for many services designed to advance and improve the State's industrial economy. Since the availability of trained workers is a major factor in this process, the vocational educator will find such an agency interested in his program and frequently able to be of real help to him in a number of ways. Local or regional representatives are usually available for consultation.

HEALTH AGENCIES

With the rapidly increasing involvement of the vocational programs in the health–related occupations, the State and local health agencies and their officials become important sources of advice and support for local vocational leaders. The public health offices, at State and local levels, should be consulted in planning and in operating all courses in the health and para-medical areas. They will have some responsibility for determining needs and manpower priorities, quality of programs, nature of the training, and utilization of graduates.

As government and government services continue to expand, it is probable that other agencies will emerge which will relate to vocational education in important ways. The tendency to require licensing of workers in more and more occupations as one means of assuring protection and satisfaction to the consumer will ultimately increase the number of agencies with which vocational educators will need to consult and cooperate.

POST SECONDARY INSTITUTIONS

Administrators of vocational and technical programs in post–secondary institutions and those whose programs are at the high school level need to coordinate their programs, not only to avoid unnecessary duplication, but for other reasons. The need for such coordination will increase with the growth of both types of programs.

For Students

Those who administer programs of vocational education at the secondary level are finding that increasing numbers of the students who complete their programs desire to continue on the further education at the post–high school level in the occupation they have studied. In the same way, students who complete occupational courses in two-year community colleges or institutes often wish to transfer into a four-year institution in a field related to the studies they have completed. It is clearly to the advantage of the students and the schools involved that the curriculums at the various levels be articulated and correlated to whatever extent is possible. A good arrangement is one which permits a student to reach successive stages leading to various employment levels, and at the same time makes it possible to continue to the next stage of education without undue difficulty or excessive loss of time. This can only be accomplished when such arrangements are actively developed through the cooperative efforts of administrative leaders of the schools serving the different levels of education.

For Teachers and Leaders

Successful working relationships with colleges and universities which train teachers are also required of the vocational administrator. These institutions are usually the only source of pre-service teacher education, and they also play an important role in much in-service development of teachers. In addition they are increasingly active in curriculum development, leadership training, and research in all areas of vocational education. Their contributions in these respects can be of great value to the vocational administrator who seeks out and uses their services.

FEDERAL AGENCIES

Certain agencies of the Federal government are closely involved in activities which influence vocational education. Two of these agencies have particularly close relationships with the program.

United States Office of Education

The Federal agency of greatest importance to the local vocational administrator is the Division of Vocational and Technical Education of the United States Office of Education. This office performs many functions which ultimately support and assist the local programs. Among them are the allocation of Federal funds, the approval of State plans, the development of program standards, promotion and leadership of the program and development of curriculum materials on a national basis. The stimulation and financing of research and the dissemination of research findings are important and growing contributions to the improvement of the program at every level.

Although, as noted earlier, the Federal office in most respects works with the States rather than directly with local leaders, the benefits reach the local programs in many ways. The Division of Vocational and Technical Education of the United States Office of Education also develops many kinds of materials relating to program organization, curriculum guides in specialized areas, and bulletins and studies in a wide variety of fields, all of which are available to the local vocational administrator. The Division of Vocational and Technical Education is represented in each of the several regional offices which have been established by the Office of Education to serve the various sections of the United States. State and local administrators may look to these regional offices for service and information.

United States Department of Labor

The United States Department of Labor is another Federal department which has much of value to contribute to the vocational educator. We have already mentioned its involvement in manpower development and training and apprentice training programs. Its researches, studies, publications and reports should be available to and used by every vocational administrator. These include labor market projections, reports on technological and occupational trends, economic studies and forecasts, early warning reports on major occupational changes, and such publications as the *Occupational Outlook Handbook, the Occupational Outlook Quarterly*, and the *Dictionary of Occupational Titles.*

OTHER AGENCIES

The strong and continuing emphasis upon ways of helping the disadvantaged and poverty stricken groups in our society to advance out of their depressed condition at once creates a demand that they be prepared for jobs. Vocational education and vocational educators quickly become involved in plans and programs to meet the needs of those who suffer from economic, social and educational handicaps. Numerous community, State and Federal action programs for these purposes have been established and financed from public funds, involving the widespread participation of local citizens. The vocational administrator should make every effort to become active in these efforts at the local level, so that the program of public vocational education is recognized as a major resource in this task. If the vocational program does not meet the needs, competing activities will be quickly developed by the new agencies to perform the role which public vocational education should assume.

NON-PUBLIC AGENCIES

There are many non-public agencies which can be helpful to the director of vocational education in the organization and operation of the local program of vocational education. These agencies can contribute in many ways to the success of the local program. Some of them are purely local in character, but many of them have affiliations with State and national groups having similar goals. They can keep the vocational educator informed as to the kinds of training needed for certain local job opportunities, the nature of the instruction required, the effectiveness of the instruction, the need for extension education, and other important matters. They can provide support for the program through their cooperative participation. They can also assist in the placement of graduates.

There are certain organizations which are widely represented and which are to be found in most communities. Among them are the following:

CHAMBER OF COMMERCE

The Chamber of Commerce or its counterpart. This organization represents employers from a wide range of business enterprises. Frequently, its organizational sturcture includes a committee on education, and this committee, as well as the organization at large, usually has strong interests in the local program of vocational education.

FARM ORGANIZATIONS

National farm organizations and their local branches have always been among the major supporters of the vocational education program. Administrators whose programs include farm-related occupations are well aware of the contributions of these organizations to the success of their programs.

PERSONNEL DIRECTORS

In many communities the personnel officers of the major employing enterprises have an organization of their own. Frequently it is known as the Industrial Relations Association, and its membership consists of those who have the responsibility for employing workers for the organizations they represent. The interests of these officials and those of the vocational education program are similar in many ways. Vocational administrators have often found this group to be very helpful in keeping their programs geared to current employment needs, and in other ways.

ADMINISTRATIVE MANAGEMENT SOCIETY

Leaders in office education have long been familiar with the Administrative Management Society (formerly NOMA) and its interest in vocational education. This organization of office management personnel has played a continuing role in assisting business educators to maintain quality programs.

PROFESSIONAL ASSOCIATIONS

Nearly every organized profession has its association devoted to the interests of the general public, the profession, and its members. Such associations are greatly interested in all programs of education which prepare persons for their field or work or for the supporting jobs at the technician level. Professional associations of nurses, engineers, designers, chemists, training directors, and many others represent this type of organization. Vocational educators will find themselves increasingly called upon to train personnel in the para-professional occupations, and they should therefore develop working relationships with the professional groups to be served.

LABOR

Vocational education has always had close ties with organized labor. The labor movement has, from the beginning, supported vocational education in the public schools, and, although labor spokesmen have not hesitated to criticize vocational education when they felt criticism to be warranted, they have always been ready to play a part in the development of quality programs. The vocational leader will find it necessary to work closely with representatives of labor if he hopes to develop a successful program.

TRADE ASSOCIATIONS

Almost every area of business, industry and trade has its association with membership representing its occupational interests. These associations can usually be enlisted by the vocational administrator to assist in determining needs for training, and in the development and operation of programs.

PARENTS

In vocational education programs which serve youth, a major success factor is the attitude of parents toward vocational education. Many parents have prejudices which are unfavorable to vocational education, and tend to reject it as being unsuitable for their children. By working with organized parent groups such as the Parent Teachers Association the vocational educator can often provide information which will reduce such prejudice and create a more fair and favorable attitude toward vocational education. To accomplish this it is necessary to show that the vocational program is open-ended rather than terminal, that it does not preclude a sound general education, and that it is not inferior or second best.

PROFESSIONAL EDUCATORS

The vocational educator needs to maintain affiliation in the associations which represent him as a professional educator. Such affiliation should not be limited to the American Vocational Association although this organization should claim his primary membership and support. He should also belong to its related State organization. It is also important that he be identified with at least one organization which represents education at large. The National Education Association and the Association for Supervision and Curriculum Development are typical of those which provide a broad perspective on education through their programs, conferences, and publications. The American Vocational Association is the one organization that represents all aspects of vocational education. It has played a leading role in the development of the program nationally, and in the passage of Federal legislation supporting vocational education.

OTHERS

Other organized groups which need to be recognized as having contributions to make to vocational education are community welfare and social service agencies and the various service clubs in the community. With the growing and necessary emphasis upon the role of vocational education in serving the disadvantaged people in our society, the close cooperation of vocational education personnel and social service agencies becomes more than ever essential. The service clubs, with their membership drawn from the business and professional leadership of the community, can be of great assistance in promoting and supporting the vocational education program, and in keeping the community at large accurately informed as to the goals, accomplishments and needs of the program.

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Chapter IX

THE JOB OF THE LOCAL ADMINISTRATOR OF VOCATIONAL EDUCATION

In the earlier history of the vocational education movement only communities of considerable size, usually cities, were large enough to justify the full-time services of an administrator for the vocational program. These administrators tended to concentrate their attention on the trade and industrial aspects of the program, since this often formed the largest area of service, and in many cases their responsibilities did not go much beyond the trade and industrial courses. This is no longer the case. With the rapid growth of the program, both in numbers and scope, and with the advent of the area and regional schools, the job of the director of vocational education has become much more comprehensive and more complex. He fulfills a role that is increasingly important in the school system and in the community.

THE ADMINISTRATIVE STRUCTURE

All public schools or school systems are under the general management of a governing board such as a Board of Education or a Board of Trustees. The selection, powers and duties of such boards are defined in State and local law. In all cases there is an executive officer for the school or school system, whose powers and duties are also defined by law. Superintendents of schools and presidents of community colleges are examples of such officers. These persons are directly responsible to their governing board, and they are provided with subordinate staffs to whom they delegate various responsibilities. Staff members report to the superintendent, and not to the governing board. The administrator of the vocational education program in a school system, or the administrator of the occupational education division of a community college is usually such a staff member. He must function within the framework of the administrative organization, and within the policies adopted by the board of control. There are some places in the nation where the vocational administrator reports directly to a legally constituted board and functions as a chief school officer.

THE SUPERINTENDENT AND THE VOCATIONAL PROGRAM

The superintendent is held responsible for every phase of the educational program, and among other things, he must try to achieve a program that is balanced–a program which will meet all the educational needs of all the students. He must work closely with the various educational specialists on his staff who have responsibilities for the major specialties and divisions within the total program. It is this relationship which exists between the superintendent and the administrator of vocational education. It is expected that all of the special area staff members will be knowledgeable and competent in the field of education as a whole as well as having competence in depth in the area they represent. This applies to the vocational administrator.

The superintendent is expected to keep the governing board informed about the purposes, progress and needs of the vocational program. He needs to work closely with the vocational administrator in this connection. The vocational administrator should recognize that his recommendations and plans must be sound educationally as well as vocationally, and relate constructively to the total educational program if they are to be accepted by the superintendent and approved by the board. To achieve this the vocational administrator must be far more than a subject area specialist or a technical consultant. He must be an educational leader who will command the respect of all professional educators with whom he works.

RESPONSIBILITIES OF THE VOCATIONAL ADMINISTRATOR

The chief administrator of the vocational program becomes responsible for many functions and activities within the school or school system. The nature of the program also requires him to take responsibilities in the community for training activities outside the school but related to it.

KINDS OF RESPONSIBILITIES

As administrative head of the entire local vocational education program, the administrator is responsible to the superintendent or other chief officer for the development, operation and effectiveness of the program. As noted later, in many cases the practical arts courses in the schools will also fall within his administrative area. Depending upon the size of the community, he will usually have one or more persons on his immediate staff to assist him.

Since the vocational program does not operate in isolation, and because it must relate constructively to the other aspects of education, the vocational director must understand the purposes and goals of the other divisions in the school program. He must be able to work in harmony with them, and not in conflict. On the other hand, in his role as a vocational specialist he must understand fully the character and scope of the occupational activities in the community. He needs to be aware also of the image of the vocational program and the general attitude of the community toward vocational education.

He must be able to recommend broad vocational education objectives and operating policies for each phase of the local program and for all branches of service. He will need to evaluate these policies and practices continuously, in the light of changing conditions.

As program administrator he will be expected to maintain quality standards of instruction, as recommended by State and Federal authorities and as they apply in the local situation.

He will work with his staff and with other professional and lay citizens in the planning, promoting, supervising and evaluation of the program.

He will recruit, recommend and train staff and provide for their supervisory support.

He will be skilled in the financial aspects of the program and he will be well informed as to the sources of the funds which support it. He will also understand the approved methods of expending the funds that are appropriated.

He will become an acknowledged leader and advisor in the field of occupational education within the school or school system and in the community at large.

These represent just a few of the broad kinds of responsibilities which the vocational administrator of a modern program must accept. His earlier training and experience may have been as a specialist in one of the branches of vocational education service, but as an administrator he must deal with all of the specialities. In addition, his role as an education leader makes demands of other kinds apart from his particular competence in educating for occupational life.

SCOPE OF RESPONSIBILITIES

The responsibilities of the vocational administrator within the school system are extensive. They are not limited entirely to the vocational program itself.

Full-Time Programs

All full-time programs for occupational preparation are under the supervision of the vocational administrator. These include a number of well established and familiar fields of training, and some which have been developed more recently. Among them are the curriculums in the several trade areas, in the service occupations, the health–related occupations, the distributive occupations and the technical curriculums. Also included are the office occupations, and agricultural–related occupations. Beyond these are the programs based upon the wage earning aspects of home economics, and special kinds of training and retraining programs for unemployed workers of which the Manpower Development and Training Program is an illustration.

Part-Time Programs

Turning to types of training which are usually offered on a part-time basis, the vocational administrator is expected to develop and operate a wide variety of such courses for the updating of employed workers and for their upgrading to more responsible positions. He must also be prepared, when the need arises, to respond to requests for assistance from employers and labor groups who desire specialized kinds of in-plant training which can be shared by the school, or conducted by school personnel in the employer's place of business. A major part of the enrollment is usually found in this area of the program.

The Practical Arts

When the administrator is serving in a public school system, the chances are increasing that he will have over-all supervision of the practical arts courses which relate in important ways to occupational education. These include industrial arts, home economics, and exploratory courses in agriculture and in general business.

Special Programs

In connection with the training of disadvantaged youth and adults for jobs, the vocational administrator may find that he will share with reading specialists and others the instruction in basic learnings which these students need to enable them to pursue the occupational training which is available.

RELATING TO OTHER AREAS AND ADMINISTRATORS

As numerous and varied as these duties may be, there are still other tasks which face the vocational administrator in the form of relationships which are shared with other persons in the educational system. He needs to understand the goals and the practices common to elementary education, and establish good working relationships with elementary administrators. Their concept of the vocational program and their understanding of its purposes will influence the thinking of boys and girls and their parents and the image they form of vocational education. In a like manner the vocational administrator should be well acquainted with the program of general secondary education since students in the junior and senior high schools become the students in the vocational courses. Regardless of the way in which the vocational program is offered–in a comprehensive high school, a separate vocational high school, an area vocational center or a community college–the vocational administrator is usually engaged in educational planning and decision making with his fellow administrators in education. The strategic importance of the guidance program in the success of vocational education means that the vocational administrator must work with guidance personnel, and assist them in every way to understand and support the vocational program.

QUALIFICATIONS OF THE VOCATIONAL ADMINISTRATOR

It should be clear that the person who can successfully direct and lead a program involving such a wide range of functions and responsibilities must possess unusual capacity and have the benefit of a broad and extensive training. Undergirding all of the special preparation and experience which such a position requires, the vocational administrator needs a sound and well balanced general education. In his professional preparation he needs to be well grounded in the theory and practice of American education as a whole with fundamental exposure to the social and philosophical foundations of the American educational process. To prepare for his more specialized role, his training should include extensive acquaintance with the structure of American occupations, the economics of occupations and manpower, occupational sociology, and techniques of occupational training. Further, he should have a sound preparation in the fundamentals of educational administration, including appropriate attention to the special issues and problems of administering programs of vocational education. In addition to all this, he should have relevant experience in vocational education or a closely related field. He must, of course, meet the minimum requirements for the position he holds as set forth in the State plan for vocational education in the State where he serves.

STATUS AND RANK

In the literature of vocational education it has often been pointed out that the vocational program in a school system may suffer because the vocational administrator is not accorded an adequate rank in the administrative hierarchy. It is suggested that he needs to function at a level just below the superintendent and should report directly to the superintendent with the rank of assistant superintendent.

It is true that the vocational administrator, to be effective, must have ready access to the attention of the superintendent in all matters relating to the vocational program. A rank which is several levels removed from the chief school officer sometimes makes this difficult. On the other hand, a higher rank guarantees neither assessibility to the superintendent nor the degree of his interest or support for the program. The actual rank held by the vocational administrator is influenced by several factors. Among them are the size of the school system and the ranks assigned to others with similar responsibilities. In a system which is too small to warrant the appointment of persons at the level of assistant superintendent, or which has only one person designated at this rank, the vocational program connot expect to be given special recognition in contrast to other important areas of the school program. Where size and administrative policy permits the assistant superintendent's rank for those in charge of elementary education, general secondary education, research, and similar functions, vocational education may reasonably expect to be represented at the same level.

There is reason to believe that the quality of his leadership and the professional respect that he commands determine the degree to which the vocational administrator will achieve status for his program. Administrative status, as measured by rank and title, does not in itself, bring recognition and support. On the contrary appropriate rank is likely to follow from quality performance and a quality program.

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Chapter X

LEADERSHIP IN VOCATIONAL EDUCATION

Many studies have been made and much has been written on the subject of leadership in general terms and on leadership in the educational enterprise. It is not the purpose of this chapter to review this literature or the various viewpoints to be found within it. On the contrary, we are concerned with a few generally accepted concepts which describe leadership in behavioral terms, and which may be helpful in suggesting what vocational education requires of its leaders.

THE NATURE OF EDUCATIONAL LEADERSHIP

In this context, leadership can be defined as the ability to generate and maintain group interest, enthusiasm and solidarity so as to achieve ultimate success in reaching a common goal. Styles of leadership vary, but in the end, the leader must be one who can, in large degree, get these ends accomplished. American society demands that the methods and strategies of leadership be consistent with democratic ideals and processes, and this applies to leadership in the realm of education. The concept of democratic leadership is highly favored in American education. There is surely much to commend it, not the least of which is the fact that it secures the best results when properly understood and practiced.

Democratic leadership in education does not imply the kind of the non-leadership behavior which some theorists would seem to suggest. The leader, for example, must not be satisfied with the status quo, but must have the vision and initiative to evaluate constantly the program he leads, call attention to weaknesses when necessary, and be alert to needed changes and improvements. When leadership is democratic, policy decisions are shared; but operating, implementing decisions in carrying out policy are often made by the leader alone. The leader is expected to make decisions, and, when necessary, issue directives. The democratic leader is not a non-participant in policy making. His views are as important, although not more important than those of others. In a democratic setting the leader is always accountable although not subservient to the group. He has a responsibility for preserving the life of the group, not in his own behalf, but for the benefit of the enterprise in which all are engaged. If he fails seriously, he is subject to replacement by democratic processes.

As a leader, he must know how to involve himself with his associates in producing whatever change and improvement is needed. He behaves as a leader when he:

Helps the group to define goals, tasks, and purposes.

Helps the group to achieve solutions to problems which arise in pursuit of its goals and purposes.

Helps to maintain group morale and stimulates constructive action in implementing its decisions.

INDIVIDUAL LEADERSHIP

Vocational education has had many strong and respected leaders in the past. Their vision and skill have given to the movement much of the character which it has today. Although we are in their debt for their accomplishments, the program today is entering a period of expansion and change which calls for leaders of equal vision and capacity. The modern vocational leader must deal with problems, issues and economic and social forces which are quite different in many ways from those of the past and which are constantly changing. The future of the program depends heavily upon the quality of leadership it can attract and develop.

The vocational education leader needs to be constantly aware of social changes to which the vocational program must respond. The changing social attitudes toward women in the labor market is one example of this. Society increasingly accepts the practice of having women with small children employed in full-time or part-time jobs. The return, in increasing numbers, of women into the labor force after an absence of fifteen or more years for child bearing also presents the vocational educator with special opportunities to prepare them to resume a work role outside the home.

Economic change should also be understood and carefully watched by the vocational leader. An economy in which jobs disappear and new jobs are created in their place with increasing frequency calls for a high degree of adaptability on the part of vocational education.

The trends and realities of political life should be equally familiar to the vocational leader, so that he may judge the appropriate times and means for securing program support. He should be among the leaders in forming community opinion and in influencing public policy as it relates to his area of special competence.

In a rapidly changing world, vocational leadership must be dynamic and forward looking. It must be able to adapt its thinking and its behavior to the constantly changing situations that arise, and, at the same time maintain stability and direction in the program. Programs which are new, or in the process of development may be more related to the realities of the current world of work than those which have existed for long periods of time. Leadership can make the difference between an inadequate, stereotyped program and one which has quality, responsiveness and vitality.

MAJOR AREAS OF LEADERSHIP

The vocational administrator is expected to exercise leadership with the superintendent of schools or other chief administrative officers, with the governing board, and with other divisions of the school program. Among other things, he must establish with them an understanding of the purpose and importance of vocational education and its role in the overall program of education. He is also required to supply leadership among the practitioners in the community of all the occupational groups represented in the vocational offerings of the school. He is as interested in on-the-job training and other forms of vocational preparation in the community as he is in the work conducted in the school because he believes that a trained work force is valuable to the employer, the worker, and the community.

He displays leadership with citizen groups in business, agricultural, industrial, labor, civic, government and social agencies. He does this by being an active participant and by accepting leadership responsibilities in such groups when possible. In all of this he attempts to create understanding and support for the vocational program and to convince the community that preparing its people for work is one of the best investments it can make.

Perhaps his most important task of leadership is with the vocational teachers and other members of the vocational staff. He must take the initiative in conducting continuous studies of training needs, in revising and improving curriculums, instructional materials and methods, and in assuring the staff of opportunities to keep up to date in their technical knowledge. His leadership must extend to other members of the school staff who are not directly involved in the vocational aspects of education. Their attitudes toward vocational education will depend greatly upon their acceptance of the vocational administrator as an educational leader.

TASKS OF LEADERSHIP

In his role as leader the vocational administrator is called upon to take the initiative in a number of specific ways at the same time that he serves as spokesman and pacesetter for the program as a whole. He must help the community, the Board of Education and the staff to reach agreement upon the goals and purposes of vocational education. He must exhibit skill in helping to plan a vocational program which will permit these goals to be achieved. He will need to recruit and train staff, to develop sound personnel policies, and to administer these fairly and impartially in the interest of staff morale. His leadership can be expressed by facilitating the efforts of others, and coordinating their activities so that every member of the staff can have the satisfaction of making his best contributions to the common task. Providing the needed facilities, equipment, supplies and materials for every teacher is a part of this responsibility. These, as well as adequate compensation for staff members, depend, of course, upon adequate financing of the program. Leadership in financial matters must come from the vocational administrator. He must also have a strong interest in evaluating the outcomes of the vocational program in terms of accepted goals. As a leader he will encourage continuous self–evaluation of the program by the vocational staff, and the re-adjustment of the program in ways which are suggested by the results of such evaluation. He will, in addition, be sensitive to public relations needs and opportunities so that the image of vocational education in the community and in the school system will be positive and favorable.

LEADERSHIP DEVELOPMENT

A mark of real leadership is an interest in the development of additional leaders. In the years ahead the rate of growth of vocational education will depend very much upon the availability of competent, well-trained leadership. Those who now serve in positions of leadership should consider themselves responsible for identifying others who display leadership potential, and for giving them opportunity and encouragement to prepare themselves for leadership in the vocational movement. By acting to recruit and prepare able leaders, those presently in leadership postions can help to assure the sound expansion of vocational education, and to prevent the leadership gap which too often occurs when experienced leaders reach the end of their active careers.

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Chapter XI

MANNING THE PROGRAM WITH EFFECTIVE PERSONNEL

Most enterprises depend for their success upon the efforts of the people who organize and conduct them. This is especially true of the educational enterprise, which is highly oriented toward people. The quality of a program of vocational education is closely related to the competence and quality of the staff. Because of the special mission of vocational education, those who teach and supervise and administer its programs come from a wide variety of occupational backgrouds. All must have certain professional preparation, much of which is similar to that of other teachers, and they should also possess the personal qualities which are so important for success in the work of the professional educator.

THE PERSONNEL FUNCTION

A staff is effective when each member is well qualified for his own share of the common task, and when all function cooperatively to get the task done. The vocational administrator will find that a major part of his time and enerby is consumed by matters relating to manning the program, which includes all aspects of personnel management. Finding, recruiting or developing people who have the qualifications demanded for the many specialized roles on a vocational staff often takes priority over some of the other responsibilities of the vocational administrator.

The number of people on the vocational staff depends upon the size of the program as measured by the numbers it serves. In some cases the vocational offerings may consist only of courses offered by a few teachers as a part of a comprehensive high school program. Under such an arrangement the administration of the vocational courses may become the responsibility of one of the teachers on a part-time basis. When the school cannot provide more diverse vocational offerings, it should consider some arrangement for shared services with other schools. This often takes the form of an area vocational school or skill center which provides instruction in a number of occupations for the students from several school districts. A full-time administrator can be employed. A large vocational department with several instructors in a high school or a community college also calls for a full-time administrator. In still larger situations, such as cities, the vocational administrator may have the assistance of supervisory, coordinating and other personnel, in addition to the teaching staff. In this case the administrator is able to delegate certain responsibilities which he would otherwise have to perform himself.

STAFF POSITIONS AND FUNCTIONS

To a large extent the staff positions in vocational education have been established by State and Federal designations, and the titles by which they are known are common throughout the country. Although there are some exceptions, the certification standards which have been developed in the separate States tend to apply to personnel who perform similar functions in most programs and are known by similar titles. Those which occur most frequently are as follows:

DIRECTOR OR ASSISTANT SUPERINTENDENT

This title applies to the top ranking vocational administrator in the local program. In the majority of cases he is known as the vocational director. In some organizations he may be accorded the rank of superintendent or assistant superintendent for vocational education. He may also, at times, be known as the chairman, or head or dean of the vocational department, as, for example, in a community college. He performs the functions of the local director, and has overall responsibility for the vocational program including all of its services.

VOCATIONAL SUPERVISOR

A person holding this title usually serves on the staff of the vocational director. His role is that of instructional and curriculum specialist. He concentrates on the task of assisting teachers to improve the quality of instruction, and is heavily involved in curriculum development and improvement. By training and experience he should be expert in instructional methods, learning theory and instructional materials, and media.

VOCATIONAL PRINCIPAL

The vocational principal administers a specialized vocational school. In this position he functions in much the same way as the building principal of an elementary or secondary school with relation to faculty, students, parents, other school officials, and instruction. In addition to the usual educational and administrative skills, he needs to possess knowledge and experience in the field of vocational education, so that the school which he heads may achieve its goals and purposes.

VICE PRINCIPAL

Most vocational schools have a staff member who serves as vice principal or assistant principal. His functions are largely administrative, with duties assigned by the principal. His qualifications should be the same as those required of the principal, since the principalship is frequently filled by promotion of the assistant principal.

VOCATIONAL COORDINATOR

Programs of considerable size may employ a staff member who functions as a liaison officer between the school,the employers in the community and labor groups. His job is to relate to the needs of students, keep the instruction in the school closely related to the employment needs and to maintain effective cooperative relationships with the agencies and individuals who have been described in Chapter VIII. The placement and follow-up of vocational graduates may also become one of his assignments. In most vocational programs, however, the duties of the coordinator are combined with those of some other staff position.

VOCATIONAL CONSULTANT

Programs which, because of their size, have a large and diversified staff may use one or more special consultants. Such a person might serve, for example, as a vocational curriculum consultant or a consultant in vocational research. Such positions may be part time or ad hoc, and the vocational administrator may call upon persons from university staffs or State Education Department staffs when needs for such services arise.

DIRECTOR OF ADULT EDUCATION

So much of the vocational program involves instruction for adults that the registration in part time adult courses is often greater than the registration of full time students. For this reason it is a common practice to employ a person full time to administer the adult program of supplementary education. The director of adult vocational education should be a qualified vocational administrator.

TEACHERS

The majority of those who comprise the local vocational staff are, of course, the vocational teachers. They fall into several categories of specialization, and because of this it is necessary to recruit them from different sources. All members of the teaching staff must meet the certification requirements which are in force in the State and in the local school system. It is usually possible to have persons who meet certain basic requirements certified provisionally, with a certain amount of time permitted them for completing the full requirements. Teachers in the following areas are found in most vocational programs:

TRADE AND INDUSTRIAL

Teachers of shop and laboratory subjects have a background of experience in the occupation they teach, sufficient to insure occupational competency, supplemented by professional training. Both the amount of work experience and the professional preparation vary from State to State. Such teachers are originally recruited from industry and other fields through a systematic plan sponsored by the State vocational department and the teacher education institutions within the State. Because of this, such teachers frequently do not possess a baccalaureate degree when they qualify initially for vocational teaching, but many States make it possible for them to earn a professional degree through in-service study.

Some vocational schools have teachers of related subjects in trade and industrial courses, such as related mathematics, science or drawing. These teachers instruct students in these subjects as they relate to the occupations which are being studied. Experience in the occupations being taught, as well as formal preparation in the subject matter are desirable as background for teachers related subjects, and such qualifications are usually sought when they are employed.

AGRICULTURAL

Teachers of agriculture or any of its related branches are usually graduates of a college or university program of agricultural education which also includes basic courses in teaching. Therefore they hold a degree at the time they enter teaching, and are prepared in much the same way as teachers of academic subjects. Most teachers of agriculture come into teaching with some experience in farm work as a background.

TECHNICAL

Technical teachers, like shop subject teachers, are recruited from the occupational world, and have sufficient experience to assure competence in the subject they will teach. In most cases they possess a technical degree, or an associate degree, which they earned prior to their work experience. Those who teach in secondary schools are usually required to complete certain courses in the fundamentals of learning and teaching, either before they are employed or immediately following employment. Technical teachers in community colleges and other post-high school programs do not always have to pursue professional training for teaching, but most of them find it to their advantage to prepare themselves professionally through in-service courses.

Office Education

The office practice, secretarial and other business courses form an important part of the vocational program. Office education teachers are usually trained in colleges and hold an appropriate degree in business education. Work experience in the business field is desirable but this is not a requirement in all cases.

Distributive Education

Distributive education is broad in scope and offers a variety of training options for the development of competencies needed for the attainment of individual distributive occupational objectives. Teachers of distributive subjects, therefore, must be well grounded in the subject matter field of marketing. In order to assist students in applying classroom instruction to the realities of the work environment, the teacher must have had previous experience in one or more distributive occupations. Professional preparation is also needed to assure the proper conduct of cooperative training and project training.

Home Economics

Teachers of home economics are usually graduates of a college or university curriculum which includes general education, professional education and home economics subject content. Experience in the occupational area being taught is recognized as desirable background for teachers of the gainful employment phase of home economics.

Health Occupations

Health occupations are taught by persons who have been trained in the occupational field in which they will teach and who have also had sufficient practical experience to establish occupational competency. Their professional preparation for teaching is often completed in colleges and universities after they have begun to teach.

Teacher-Coordinator

The teacher-coordinator conducts the cooperative work-study type of vocational course which is popular in so many vocational programs. Under this arrangement he becomes responsible for a group of twenty or more students who spend half of the time under instruction in the school and the remainder employed in a job where they prepare for full-time employment after graduation. Typically each member of the group works for a different employer, and the range of jobs held by the students is often quite diversified. While in school the students study the general academic subjects required for graduation, and usually spend one period per day, as a group, with the teacher-coordinator. At this time the teacher-coordinator conducts instruction in work- related subjects and provides group guidance and advisement. He is also responsible for securing the jobs which provide the work experience for the students, for visitation and observation of the students on the job, and for sharing with the employer the evaluation of the students' job performance.

It is clear that the teacher-coordinator should be a person with multiple skills and talents. Some experience or contact with a variety of occupations is desirable, coupled with teaching and coordinating skills, and the ability to relate well to employers, students, parents, and school personnel. There is no single source from which such teachers can be recruited, and often they heave to be developed by encouraging and assisting existing staff members to become teacher-coordinators.

Part-Time Teachers

Vocational programs make much use of part-time teachers whose full-time employment is in the occupation they teach. Much of the instruction in the part-time and extension courses for adults which vocational schools offer is provided by persons working in business, industry and the other vocational fields. They often develop into excellent teachers, and not infrequently move into full-time teaching careers. This group of teachers is, in fact, one of the best sources of recruiting qualified and interested persons to prepare for careers as vocational teachers. They also keep the program up to date because of their familiarity with current occupational practice.

Teachers for Special Programs

The increasing diversity of program services which occur in the local program often requires that teachers be recruited for part-time and full-time, although perhaps short-term teaching assignments. The Manpower Development and Training courses offer a good example of such a need. In these cases it is necessary to seek out persons in the community who are well qualified occupationally, and who have the necessary personal qualifications to relate well to students. They must be carefully selected, because the students they will teach are often in need of special understanding and help. Formal certification is often required for such teachers, including some professional training. Short intensive programs are sometimes provided for them as an introduction to the basic problems of teaching, but most of their development as teachers will be accomplished through skillful supervision on the job.

Vocational Counselor

An increasing number of vocational programs are adding vocational counselors to their staffs. These counselors have special training which helps them to assist young people and adults to choose vocational courses which will be of most benefit to them. They may also help graduates to find suitable jobs when training is completed, and are available for general guidance and counseling while the student is in school.

SELECTION OF STAFF MEMBERS

Finding and attracting qualified staff for vocational programs presents all the problems which are involved in securing staff for other areas of education in addition to certain special problems. The vocational administrator cannot rely entirely upon the output of teacher education institutions to supply his staffing needs. He must turn to several other sources, including business, industry, labor groups and the technical professions. Graduates of vocational programs who have performed well in their jobs can often be interested in returning to teaching, after suitable preparation. Administrative, supervisory and teaching positions can sometimes be filled with experienced personnel who, for some reason, become available. To a great extent, however, they must be identified, recruited and trained for the jobs they are to fill.

Each member of the staff should be selected on the basis of his occupational, professional and personal qualifications in relation to the job for which he is being considered. Because of the frequent necessity for on-the-job development of vocational personnel, their capacity for such development becomes as important as the actual skill and training which they may possess when they are employed.

In all cases where federal funds are involved, staff members will have to meet minimum qualifications as set forth in the State plan for vocational education. The vocational administrator must be thoroughly familiar with these requirements.

Several sources for recruiting personnel have already been suggested. Among these the vocational division of the State Education Department and the vocational departments of colleges and universities can be especially helpful to the local administrator in securing qualified staff.

RETAINING AND IMPROVING STAFF

Recruiting capable staff members is only one step in the process of successful personnel management. Maintaining high group and individual morale within the staff is an ongoing part of the administrator's task. Positive and constructive attitudes toward the program and its accomplishments on the part of the staff, and a sense of pride and professional satisfaction, are among the best indicators of a healthy and successful program.

It is not the purpose of this chapter to discuss at length the personnel policies and practices which will promote good staff relationships and help to retain good staff members. The chapter bibliography contains some readings which will help the vocational administrator to study this question in more depth. There are three policies, however, which will do much to assure that good staff members, once secured, will remain satisfied and productive.

The first is the practice of involving the staff in all program planning, so that they may be at all times informed of plans and developments which will affect them. The second is to develop, with the participation of the staff, sound personnel policies. These policies should be put in writing, and they should be administered in a fair and impartial manner. Third, the vocational administrator should keep staff members informed of all opportunities for professional improvement and advancement which become available and help them to take advantage of such opportunities.

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Chapter XII

FINANCING THE LOCAL PROGRAM OF VOCATIONAL EDUCATION

Paying the costs of an educational program has always been a major concern of the school administrator. At times it seems to occupy more of his time and attention than any other aspect of administrative task to the extent that other important program needs become neglected. With careful planning this need not be so, although failure to manage properly the financial affairs of a program can quickly lead to trouble. Effective financial management includes not only knowledge of and access to all legitimate sources of revenue, but also wise allocation of available funds and careful control and accounting.

THE COSTS OF VOCATIONAL EDUCATION

It is a mistake to attempt a program which is too large to be adequately supported by the funds available. In this case the quality of the program suffers. It is better to operate a smaller program of high quality. A quality program is much more likely to encourage the community to provide greater budgetary support in order to permit program expansion.

The per pupil cost of vocational education is higher than the cost of almost any other area of the school program. The community should understand this when the program is being planned. Because of the higher costs, the vocational administrator must be prepared to demonstrate by the outcomes of the program that the greater expenditures for the vocational program represent a sound investment for the community to make in its people.

Although there are some exceptions, the great majority of vocational programs are financed out of a larger educational budget which covers the entire local program of education. A few programs enjoy an independent status, with direct taxing power and access to revenues and freedom to expend funds as budgeted. It is much more common, however, for the vocational program to share in the overall local school budget, as a part of a local school system or as a division of a community or junior college. In both cases the vocational administrator is expected to carry out the budget planning to defend the budgetary needs of his program, and to follow the established procedures for the expenditure and control of funds.

SOURCES OF REVENUE

There are several sources of revenue which may be available, directly or indirectly, for the financing of the local vocational program. The vocational administrator should be in a position to take advantage of all legitimate sources of income in meeting program costs.

FAMILIARITY WITH SOURCES

In planning a budget, the vocational administrator must be aware of the special sources of income which are available for vocational education, as well as the more general revenue sources from which the vocational program will be supported. He should understand the financial policies which are in force in his own State regarding the allocation of State and Federal funds for vocational education. He must be familiar with the formulas which apply in the State for the distribution of such funds, so that he can estimate probable income from these sources and advise his superiors how to apply for them and how much they may expect to receive, as they plan the total budget.

SPECIAL SOURCES–FEDERAL AND STATE

Among the special revenue sources are appropriations made by the Congress under the several pieces of legislation which have been mentioned in Chapter III. Funds in widely varying amounts, can be secured for local program support under each of these laws with the exception of the Fitzgerald Act, providing that the program, or segments of it can quality under the terms of these laws and under the legal and administrative policies of the State where the program is located. Federal funds are seldom available directly to local education programs, but are channeled by the Federal government through the State government to the localities. Clearly, then, the vocational administrator must be well–informed and up to date on all State policies relating to such funds. He needs to know the State agencies which administer the funds and the officials of State government who represent them. The administrator will find that funds are allocated for both current operating expenditures and for captial expenditures such as equipment and the construction or modification of buildings.

In addition to Federal appropriations to the localities through the States, most States now contribute significantly from their own revenues to the support of vocational education. In fact, most Federal legislation requires that Federal funds be at least matched by State and local contributions. Vocational programs share in the State money which is appropriated for general school support, and often benefit from special funding provided by the State. The vocational administrator needs to be thoroughly familiar with such sources. He will also find that funds stemming from the numerous Federal and State laws and appropriations are frequently earmarked for particular purposes within the vocational program. He must understand the details of this process so that he can observe the restrictions which are imposed in planning the budget and spending the money.

LOCAL SUPPORT

The largest share of the financial support for the vocational program is usually provided by local tax sources. An exception to this may occur in States which operate vocational schools or programs as a State system. Local government relies mostly on two sources of tax revenue–the general property tax and the sales tax. It is to the local taxpayer, therefore, that the vocational administrator has to justify his program most completely and most frequently.

OTHER SUPPORT

To a greater extent than some other areas of education, the vocational administrator can augment his budget by well–selected loans or gifts of equipment and grants of funds from private industry or business. At times certain instructional materials may also become available as surplus from industry. There is also a process through which equipment and consumable materials of many kinds can be secured free, or at little cost, as surplus from various governmental agencies. The vocational administrator should be alert to all these sources, and use them when they can help the vocational program. However, he should only seek those items which clearly fit into the instructional program, and will not accept equipment or materials merely because they are available.

PREPARING THE BUDGET

The educational budget ordinarily divides itself into two parts-the current operating budget and the capital budget. The operating budget is usually set up on an annual basis, and is paid for from current tax and appropriation sources which have to be renewed each year. The capital budget finances long–term capital needs, such as land acquisition, building construction and equipment although the operating budget may include limited capital funds. The local and state funds for major capital expenditures are usually secured from long–term bond issues, although States may channel into local capital projects certain State and Federal funds which are appropriated annually. Both current operating funds and capital funds must be spent and accounted for in ways which conform to the accounting requirements of Federal, State and local laws. The vocational administrator must be well acquainted with these requirements.

THE OPERATING BUDGET

The manner in which the operating budget is broken down into sources of revenue and expenditures will vary in matters of detail with each local program. The vocational budget will have to conform to local practice. The following, however, suggests typical items of expenditure which are found in most educational budgets:

- Salaries of professional personnel
- Salaries of other personnel
- Consumable supplies, instructional
- Consumable supplies, non-instructional
- Plant operation–rent, heat, light, power, cleaning and maintenance repairs
- Travel of staff
- Pupil transportation
- Rental of equipment
- Rental of space
- Repairs to plant and equipment and replacement of equipment
- Textbooks and library books
- Printing
- Office expense–supplies, postage, telephone
- Contingency fund
- Fixed charges, including all fringe benefits for staff and cost of amortizing capital bond issues

Within this framework, adapted to meet local requirements, an expenditure budget can be projected and planned. From the sources previously suggested, the revenue side of the budget can be estimated. Projected revenues and expenditures must balance. A budget is actually a blueprint of the program stated in financial terms, and must reflect the goals and aspirations of the vocational administrator and his staff.

THE CAPTIAL BUDGET

The capital budget, to a large extent, reflects the long range aspect of program planning. It calls for the most careful planning, and the employment of every useful device for forecasting the size and nature of the program's future development.

The usual items in a capital budget are these:

- Acquisition of land
- Architects fees
- Construction of buildings
- Major additions to buildings, and major remodeling
- Purchase and installation of equipment

STAFF PARTICIPATION

It is a mistake for the administrator to treat the budget-making process as a pure administrative responsibility in which the staff is advised only of the amounts available to individual members for their needs. It is also a mistake for the administrator to manipulate the budget in ways which reflect his own program priorities with little or no consultation with the rest of the staff. Since finance has such an important impact upon educational outcomes, budget-making and the things for which funds are expended require careful professional decision making. If the administrator expects the staff to behave professionally, he must share with them the important professional decisions, and this means that they must participate in the financial planning.

The vocational administrator will usually have to submit the vocational budget requests to his superior officer and to the members of the governing board in charge of the program. He will often find himself defending the proposed expenditures in relation to other necessary, but non–vocational areas of educational need. He will therefore have to be very well prepared to translate to translate the amounts requested into projected program outcomes, so that they can be readily understood by his superiors.

It often happens that the budget requests from all of the divisions of the school or school system total more than the board or community believes it can approve. All segments of the budget, including the vocational, are then required to accept some reductions or adjustments in arriving at the final, approved budget. When this occurs, the vocational administrator should fully inform his staff of the reasons for the reductions and the amounts finally allocated. Each staff member should be aware of the amount of the money to be available for the budgetary year for the activities for which he is responsible. He, in turn, can then plan intelligently and behave responsibly with respect to expenditures. Should any further adjustments be necessary during the course of the year, they should be made only after counsultation with the staff members who are affected.

BUDGETARY MANAGEMENT AND CONTROL

All school administrators must observe strictly the accounting and auditing procedures which assure that the expenditure of funds is in accord with accepted and approved practice. The vocational administrator is no exception to this rule. He has to understand clearly the accounting and control provisions which are in force in the local educational program and follow them carefully in the handling of the financial aspects of the program. Those responsible for the business management of the schools can be relied upon to develop procedures which will conform to sound principles of accounting and general control.

Regardless of who else may be involved in the expenditure of vocational funds, the vocational administrator will be held responsible for the process. He must therefore be sure that he has adequate information and controls. One way to assure this is to have all requisitions and other authorizations for expenditures reviewed by him and subject to his signature. When the program is so large that this becomes unduly time–consuming, the responsibility may be delegated to a dependable staff member who keeps the administrator informed of the approvals authorized and discusses in advance any unusual expenditures.

The vocational administrator should expect to receive from the chief fiscal officer of the school or school system a monthly statement of expenditures and balances in all accounts involving the vocational program. In turn, he should see to it that all members of his own staff receive a monthly statement relative to the accounts which affect their own program areas. In this way all will feel that they are sharing in this important aspect of program operation, and they can plan their activities with confidence and good judgement.

Another detail of good financial planning and control is the cost analysis of various parts of the vocational program. This can be done by the accounting division of the school business office. It is not done primarily to make unfavorable comparisons between the costs of various vocational courses, because there may be good reasons why some courses involve higher costs than others. Rather, it provides the staff with data which can be very useful in overall planning and decision making in securing the best quality education from the total funds available.

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Chapter XIII

THE IMPROVEMENT OF INSTRUCTION

The educational administrator has multiple responsibilities, most of which are identified and discussed elsewhere in this volume. Fundamentally, however, they are all contributory to the process of instruction and the advancement of learning, because this is the basic mission of the school. The vocational administrator, like other educational administrators, must always be aware that unless the results of his many activities are reflected in quality instruction and improved learning, his function can hardly be justified.

Instruction is improved through the improvement of teaching and through enhancing the conditions of learning. We still have much to learn about the process of learning, both in its collective and individual aspects. Nevertheless, much is already known. It is the obligation of the vocational administrator to be familiar with and understand the best of what is known, and to be constantly alert to the new knowledge which emerges in the field of learning theory. He must also provide means for keeping teachers up-dated in this respect, and for maintaining the conditions which will permit them to incorporate into their teaching the practices which will be most favorable for successful learning.

THE MODERN APPROACH TO INSTRUCTIONAL IMPROVEMENT

In the past, methods for improving instruction assumed that the administrator or supervisor was better trained and more skilled than the average teacher; and should, therefore, prescribe, in large measure, how the teacher should perform and behave in becoming more effective in his teaching. Acting on this assumption, the improvement of instruction was perceived to depend largely upon administrative prescriptions, advice, and directions to teachers, followed by inspections, checks and admininstrtive evaluation. The modern approach recognizes that most teachers are thoroughly trained professionals who have approximately the same knowledge of the teaching-learning process as does the administrator. They are therefore ready to share fully in the setting of instructional goals, the planning of teaching strategies, the selection of materials and equipment for instruction and the evaluation of the results of learning. Under this concept the administrator becomes a partner with the teacher in planning for instructional improvement. His special, additional contribution is that he assumes the responsibility for implementing the improved instructional procedures by assuring the conditions, the materials and the supporting services which the teacher requires.

THE ADMINISTRATOR'S CONTRIBUTION TO INSTRUCTION

The educational administrator occupies a strategic position in determining the quality of instruction. His decisions and actions can make the difference between successful teaching and learning and an inadequate learning situation. Even the best teachers cannot perform well without his assistance.

THE LEARNING ENVIRONMENT

There are numerous ways in which the vocational administrator can influence the quality of instruction so that learning is improved. He takes a fundamental step in this direction when he recruits well-qualified teachers who recognize the importnace of good instruction and know how to provide it.

Understanding the learning process and possessing the skills and insights of a good teacher is not enough, however, to assure that the well-qualified teacher will be effective.

His professional skills and knowledge must be supported in many ways, and the administrator is involved in most of them. It is the administrator's responsibility, for example to see that the teaching-learning environment is thoroughly adequate. This means that the teacher is able to work in suitable classroom shop, or laboratory, with sufficient and suitable space. No modern educational program can function without necessary library facilities and a well chosen collection of library materials. All of these facilities must be properly maintained and kept in good repair.

EQUIPMENT AND MATERIALS

Good teaching requires that teachers be furnished with sufficient and appropriate equipment, and that this too be well maintained. Except for minor adjustments, teachers should not be expected to serve as maintenance mechanics, and students should not be assigned to the repair of instructional equipment unless the work clearly contributes to the learning process as established by the curriculum.

Similarly, teachers and students should be provided with all necessary instructional devices and instructional materials in sufficient quantities. These include audiovisual devices and materials, programmed learning materials, access to computer-based and computer-assisted instruction, and other modern media.

CURRICULUM IMPROVEMENT

The administrator must give teachers the help they need in keeping their courses of study under constant review and development. Perhaps the most important contribution the administrator can make to this process is to make available to teachers the time and clerical assistance required for curriculum improvement. It is a growing practice to employ teachers to work on curriculum and course materials during the summer months. Consultants from industry, universities, and other school systems should be made available for this purpose. Teachers should also be supplied with reference materials and subscriptions to professional and trade journals. These can become a part of the library collection.

STUDENT ACHIEVEMENT

Quality instruction calls for appropriate standards of student achievement, and this is also essential for the evaluation of learning outcomes. The administrator should be well trained in the process of evaluation, so that he can assist teachers, especially beginning teachers, in this rather difficult task. Actually, this is only one of the elements of good instruction which most beginning teachers find to be difficult, and the administrator must be prepared to assist new teachers to improve all aspects of their teaching through consultation, observation, advisement, and, at times, by demonstration. In large programs this becomes the major function of the vocational supervisor.

INDUCTION OF NEW STAFF

The proper induction of new staff members to their jobs will reduce the problems which may otherwise occur and help to assure the successful orientation of the new teacher to his students, his colleagues, and the community. This should be a planned procedure, and part of it should familiarize the new staff member with all of the personnel and instructional policies and the routines which will affect him and his students. It is most helpful if the new teacher can be employed for at least a short period before he has students assigned to him, so that he can plan effectively and in terms of what he will have to work with. A brief, but well-planned induction experience will do much to relieve a new teacher's anxieties and uncertainties, and help him to begin his work with more confidence and satisfaction.

IN-SERVICE TRAINING

Instruction is also improved by various kinds of in-service training programs for staff members. These may take the form of workshops, institutes, courses, clinics, visitations to programs in other communities and other means for bringing staff members into contact with new developments in education, business and industry. In-service activities are more successful when they are planned with the participation of the staff members who will be involved in them. Nevertheless, the vocational administrator must exercise the initiative and leadership, and see to it that the numerous arrangements which an in-service program requires are carried out. Colleges and universities, as well as State and Federal vocational offices frequently offer in-service training opportunities. The administrator should encourage staff members to enroll in such programs, and should make the necessary provisions for time and finance so that the encouragement is supported by tangible assistance. Valuable experience can also be provided through locally conducted programs, using local, university and State and Federal personnel to assist. Part-time staff members, as well as full-time personnel should have the benefit of in-service training and development.

OCCUPATIONAL UPDATING

Vocational teachers have a special need for continuing contacts with the occupational world in the field which they teach. Some of this can be accomplished by in-service programs where they join with others who teach the same subject. Much of the occupational updating, however, must be secured through individual initiative and effort. Here, again, the vocational administrator should not only encourage, but actively assist each vocational teacher to keep alive his occupational contacts. In addition to learning about changes in occupational practice they keep employers and others informed about the school—an excellent public relations medium. They also improve the opportunities for the placement of vocational graduates. There are other means, of course, which the vocational administrator may use to maintain continuous coordination between the instruction in the school and the school's ultimate customers, the employers. Such coordination is, in itself, a way of improving instruction.

GUIDANCE AFFECTS INSTRUCTION

Instruction is intended to produce successful learning. This is not likely to happen if the students have chosen poorly in selecting the vocational course in which they are enrolled. It is therefore highly important for good instruction that all students have the benefit of a strong program of guidance and advisement before choosing a vocational curriculum. The vocational admininstrator should play an active role in developing and supporting such a guidance program. It cannot be left entirely to the decisions of pupil personnel administrators and guidance counselors. This is a shared responsibility which requires leadership from vocational education personnel as well as from guidance specialists.

FEEDBACK FROM GRADUATES

A very useful source of information which should strongly influence instruction in vocational courses is that available through the follow-up of vocational graduates after they have been placed in jobs. No vocational program can be wholly successful unless there is regular and systematic follow-up of graduates. Follow-up has many values, and one of these is the improvement of instruction through the feedback that comes from the graduates and their employers. Follow-up can be done in a variety of ways. None is better than the visitation of graduates on the job, with the opportunity it presents for conversations with the employer. Suitable questionnaires can also be used, and many schools find that alumni associations provide a form of contact with graduates that yields good results in terms of instructional improvement.

PROFESSIONAL AFFILIATIONS

Still another means for maintaining quality instruction is to have teachers become members of one more associations related to their work. Teachers of vocational subjects can profit by membership in organizations representing professional educators and also by being active in the union, trade, agricultural or business organization which represents their occupational area.

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Chapter XIV

THE VOCATIONAL STUDENT

Vocational education serves a wide variety of students. It serves both men and women, youth and adults, the employed and the unemployed. It serves those who are preparing for their first job, those who seek to improve themselves after employment and those who need retraining. It can be adapted for people with a wide range of abilities, interests, aptitudes and handicaps. The Vocational Education Act of 1963 is an all-inclusive law which encourages the development of vocational education to meet the needs of all.

VOCATIONAL CHOICE

Vocational education is planned to help people enter the occupation of their choice and to continue to advance in skill and competence through further training. How well it succeeds depends greatly upon the suitability of the occupation the individual chooses to prepare for. Admininstrators and counselors should talk with students and parents in terms of different kinds of abilities, rather than gradations of ability. What is necessary is to help the individual determine his prospects for success and satisfaction in a vocational course and in the job it is expected to lead to.

To prepare students for jobs in which they have little probability of success is educationally unsound and it is unfair to the student. There are no foolproof methods for predicting with certainty the ability of an individual to succeed in a particular occupation, but there are many ways for helping most people to avoid the most serious mistakes in selecting a vocation. Fortunately, the occupations in our modern economy are so great in number and so varied in their requirements, that, with very few exceptions, everyone who desires to work can succeed in some job that suits his level of ability if he has the necessary education and training. Vocational education can meet this need.

BENEFITS TO THE STUDENT

A student who selects his occupation carefully and studies it seriously in a quality program of vocational education can expect to realize important benefits. He will be helped to fill a self–dependent and contributing economic role in the world of work. In the American society, everyone who can do so is expected to work, and the pursuit of a vocation is a social as well as an economic necessity for most people. Vocational education, therefore, can become a means for the fulfillment of personal and social goals at the same time that career goals are being achieved, and this is essential to the individual's sense of worth. Studies have shown that graduates of vocational courses, in the majority of cases, have found long range satisfactions in their work, and generally credit vocational education for their success.

THE VARYING REQUIREMENTS OF OCCUPATIONS

Occupations vary widely in the kinds of abilities, aptitudes and interest which they demand of those who pursue them. Good vocational guidance helps the student to understand this fact and, at the same time, realistically to assess his own strengths and limitations. It is important that he not misread his own interests nor overestimate his potential for success in a particular occupation. It is equally important that he not underestimate himself and settle for an occupation where the demands are too far below his actual capacities. Although certain tests and other indicators are helpful in judging probable occupational success, only actual performance on the job can give a final answer. This is why try-out experiences and work-study types of vocational programs are so useful in making long–term career decisions.

TECHNICAL JOBS

Some of the well known occupational areas include jobs suitable for a large range of abilities and talents. Others call for rather specific kinds of aptitudes. Nearly all jobs in the technical-scientific categories require the worker to learn mathematical and scientific concepts readily and to use them frequently in his work. Jobs of this kind call for good ability in abstract thinking and problem solving and above average academic competence. Those who have difficulty in these respects are usually well advised to avoid such occupations.

SKILLED JOBS

The skilled craft type of occupation calls for many of the same abilities which are demanded by technical jobs with less emphasis upon the highly theoretical learnings and more aptitude for planning, visualizing and constructing. Skill in inter-personal relationships is less essential, but still of considerable importance.

SEMI-SKILLED JOBS

Semi-skilled work calls for less conceptualization and less extensive cognitive learning. Yet the worker needs to be dependable and expert within a narrow range of skills. There are many such jobs in both production and service occupations that can be filled by persons with less than average academic ability.

JOBS IN OFFICE OCCUPATIONS

The office occupations contain jobs suited for many levels of ability. These range from management and specialized secretarial tasks to routine typing, filing and simple record keeping. Some are office type occupations while others involve public contact work where social skills are very valuable. The introduction of the computer and of machine data processing has brought a whole new array of opportunities for persons with a variety of skills and interests.

HEALTH SERVICE OCCUPATIONS

Occupations connected with health services represent a new growth area for jobs. Here, again, there are jobs that are technical and para-professional in character requiring average or above capacity. There are others that can be filled successfully by persons with less than average academic aptitudes, where social, interpersonal and human relations skills are as important as technical knowledge.

AGRICULTURAL OCCUPATIONS

Those who work in modern agricultural activities must possess an increasing fund of scientific knowledge, coupled with mechanical skills and an understanding of economics and business management. The many industries and businesses which are related to agriculture offer a great variety of job opportunities in the agri-business field for which young people can be prepared.

SERVICE OCCUPATIONS

One of the fastest growing segments of the work force is the area of the service occupations. The number and diversity of such jobs continue to increase, and already the number of service-type jobs is greater than the number of jobs in the goods-producing industries. Service jobs occur in the mechanical trades, in business, in the social services, in finance, in recreation, the hospitality industry, personal service and many others. They vary widely in the amount and kind of education they require, but most service jobs involve a large component of social and human relations skills.

JOBS IN SALES

The distribution of goods and services offers employment to a large number of people. Here, again, there are fine opportunities for those whose interests and aptitudes are not suited to the technical, scientific or industrial kind of job. The distributive occupations have room for persons with many kinds of abilities in jobs ranging from the managerial to the routine.

JOBS RELATED TO HOME ECONOMICS

Home economics education has added to its long-time purpose of preparation for homemaking and the responsibilities of family membership that of preparation for gainful employment in occupations which utilize knowledge and skills in home economics. These jobs are varied in their requirements and offer opportunities for many individual abilities and talents. They are in the occupational areas of food management, production, and service; care and guidance of children; institutional and home management; clothing management, production, and service; and home furnishings and equipment services. Some occupations are at the technical or para-professional level such as food service manager or supervisor, assistant in a nursery school or a day care center, and institutional housekeeper. Entry level occupations include such jobs as child care aide, motel or hotel housekeeping aide, and clothing alteration.

MEETING THE NEEDS OF ALL

It is important for the vocational administrator and for guidance counselors to be well acquainted with the kinds of abilities and aptitudes which are needed for success in all of the areas of occupational life. Another responsibility is to provide courses in such a variety of occupations that students of all ability levels and interests can find a path to an occupation which is well–suited to their capacities. A third step is to give positive help to students in their search of an occupational choice which will serve them best. To meet the needs of all will require that programs of vocational education broaden their range of offerings greatly.

ASSISTING STUDENTS TO CHOOSE

There are many resources and many devices for helping individuals to make more satisfactory decisions about the occupation they wish to prepare for. This applies to youth in school and also to out-of-school youth and adults. Only a few of these can be suggested here, but the alert and resourceful administrator or guidance specialist can discover many more.

OCCUPATIONAL INFORMATION

For all who face the need for vocational choice, but especially for youth in school, the starting point is to be informed about occupations in terms that are accurate and meaningful. There is a growing belief that this process should begin in the elementary grades. At more mature ages this needs to be augmented by opportunities to experience, with an exploratory emphasis, some of the features of typical occupations. All of this should be correlated with systematic vocational counseling, including aptitude and interest testing at the appropriate stages.

HELPFUL GROUPS AND AGENCIES

The advice of employers and advisory groups, the experience of previous vocational students and graduates, and the many published materials which are available, can be used to advantage in the effort to inform students about occupations. The personnel of the public employment service can also be very helpful in this regard. They can also furnish counseling service and, if requested, will administer tests which have been developed as occupational advisory tools. The employment service will not usually administer these tests, however, to persons under seventeen years of age.

ROLE OF THE PARENT

For school-age youth it is quite essential that the parents be brought into the process of career choice because it is known that they usually exert a strong influence on the career decisions of their children. This can be done through conferences, courses for adults on occupational information, and other means. For some vocational courses it may be wise to have an interview with the parent in every case before the final decision is made to enroll the student in the course.

THOSE WHO HAVE LEFT SCHOOL

Youth who have left school and need to return for vocational training require guidance and counseling as much as those who remain in school. This is true also of adults who wish to benefit from vocational education. Counselors who work with these students need to be well-trained and experienced. They must be sensitive to the special needs, the anxieties and the past experiences of the out-of-school youth, often a dropout, and the adult who returns to school to meet his special occupational needs. The employment service counselors and the results of their tests can be especially helpful in assisting persons from these groups to make a good selection of an occupation before investing their time in training.

THE NEEDS OF THE DISADVANTAGED

There is a widespread realization that a substantial segment of our population–because of educational, health, social and other deficiences–is unable to share in the generally high standard of living which the nation as a whole enjoys. Strong efforts are being made to reach and serve these people, many from minority groups, with education–including vocational education–so that they may move into the mainstream of American economic and social life. Under the Vocational Education Act of 1963 vocational education has a special mandate to assist the disadvantaged individual to achieve a useful place in the world of work. The special needs of such persons may result from cultural, ethnic, academic, economic, educational, physical or mental handicaps.

In serving these students the vocational educator must inform himself about their characteristics, their deficiencies and their attitudes in order to help them select and prepare for suitable vocational roles. In the case of those with physical handicaps or mental retardation, he must identify kinds of jobs which their handicaps will permit them to perform, and then devise the best means for their training. Those who are disadvantaged in other ways require much individual diagnosis and assistance. It must not be assumed that they are capable of preparing only for low-skill or low-prestige jobs, although this will be true for some. It may often be necessary to begin by strengthening their basic general education before vocational education can be effective. The vocational educator should not hesitate to assume this responsibility in cooperation with specialists from other educational and social areas. The bulletin entitled, "The Youth We Haven't Served," which appears in the references below, can be of great value to the vocational educator in working with the disadvantaged.

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Chapter XV

PROVIDING FACILITIES AND EQUIPMENT FOR THE PROGRAM

THE IMPORTANCE OF GOOD FACILITIES

In the earlier history of vocational education it was frequently necessary to begin new programs in buildings no longer needed for academic purposes, or in other available quarters which were not designed for vocational instruction. Such programs were placed under a serious handicap, because suitable facilities and appropriate equipment are as essential for good vocational education as for any other type of education. Often, after a program had proved its value, even when housed inadequately, new and more suitable space was provided. The present trend, however, is to prepare for the introduction of a vocational program by building a facility of proper size and design, so that the program can get under way without the disadvantage of using a second-hand plant. The Vocational Education Act of 1963 recognized the need for proper housing by providing that a portion of the funds available under the Act may be used to construct area vocational schools.

FACILITIES RELATED TO PROGRAM

A good vocational facility needs to be designed and built to accomodate the program that will be conducted in it. This means that it will have features that are different from those found in schools offering academic programs only. These differences in planning and design are important whether the facility is to be a separate vocational school or center or is to be part of the structure of a comprehensive school. The relationship between the nature of the building and the educational program it will house is complicated by the fact that educational programs, including those in vocational education, will surely change over a period of years. This requires that a considerable degree of flexibility be maintained in the design and construction of the facility. The achievement of this necessary felxibility will be discussed more fully at another point in this chapter.

It has long been a basic principle of good vocational education that the conditions, surroundings and equipment of the school should resemble as closely as possible those that the trainee will encounter on the job. It is also important that any facilities which are created should support the long range local plan for the development of a sound program of vocational education, and not be just a place in which to offer some vocational courses. This, of course, pre-supposes long-range planning, and also adds to the need for flexibility and the capability for expansion.

PLANNING FOR MULTIPLE USES

To meet the needs of a well-rounded and balanced program, a building must provide for more than the education of the in-school youth group. It has been characteristic of vocational education programs that the number of employed adults and employed youths enrolled in part-time, short-term courses often exceeds the number of full-time, in-school youth. There is presently an increasing demand for the training and retraining of displaced workers, and facilities must be planned with this in mind. Planning must also anticipate the use of the facility during most of the daytime hours and during the evening hours as well. A vocational program should also be in operation throughout the year, with many activities scheduled for the summer months. This must be considered in planning for such factors as lighting, air conditioning, cleaning, maintenance, parking, and access.

This chapter will deal with the broad, general aspects which influence the planning of structures to house vocational programs. No attempt will be made to suggest those details of design or construction which are necessarily decided by architects, construction specialists, and local boards and staffs. Decisions on these matters will vary greatly, depending upon size, climate, site, availability, and many other factors. Most States have experts in school building on the staff of their Education Departments. The Division of Vocational and Technical Education of the United States Office of Education also has an advisory service specializing in vocational school buildings. Local planners should make all possible use of these State and Federal services.

THE SCHOOL SITE

The site for a vocational facility will depend upon many variables. If it is to serve students from a wide geographic and sparsely-settled area, its location will be selected with this in mind. To serve a smaller and more densely populated area, a different choice of building site will be made, and in a large city. Because of high land values, certain compromises may be necessary in site selection to avoid excessive costs.

Those who plan buildings for vocational programs should make every effort to achieve certain goals in selecting a building site. A prime requirement is that the building be accessible to the largest number of students. This means that all forms of transportation which may be used by those attending the school need to be considered in selecting a location. Adequate public and private means of transportation must be provided for. The planners should keep in mind that the vocational courses will bring attendance by large numbers of adults who will drive cars and require parking space, in addition to parking space needed for staff. There is a growing tendency for vocational courses to enroll only the older high school students, and to serve more and more post-high school students. Many of these will use cars and this will add to the parking. All of this means that the size of the building site should be generous.

Another reason for selecting a site of ample size is to provide for future expansion. There is every indication that an increasing portion of the population will be enrolling in vocational courses. When this fact is coupled with projected population growth, it would appear that most vocational buildings being constructed today will need to be expanded at some future time to meet growing needs. Sites being selected now should be large enough to permit future expansion, both in buildings and in auxiliary outdoor space.

A vocational program often includes courses which need a certain amount of out-of-doors area for instructional purposes. Such occupations as automobile mechanics, building construction, landscaping and horticulture, and others, cannot be taught effectively without access to outdoor areas, and the size should make provision for such needs, even though some of them may be in the future.

THE BUILDING

Buildings for conducting vocational programs will vary in many respects, depending upon needs, site features, costs, climate and design preferences of architects and local educators. When a vocational facility is a part of a comprehensive school plant, it will have to conform in certain ways to the overall design of the total structure. When a building is being constructed for vocational purposes only, there is no need for relating it to a building which is used for other educational programs, and this permits more freedom of planning. The importance of providing for future expansion has already been mentioned in connection with site selection. In the planning of a building, future expansion must be carefully considered. Expansion may be achieved by adding additional stories to a building, and in this case the necessary structural strength to permit upward expansion should be built into the origional structure. Ready access to water, plumbing, heating and electrical services for the additional floors should also be planned for. If the expansion is to be accomplished by attaching additional units to the original building, rather than by adding additional floors, the original building must be placed on the site with this in mind. Again, provision must be made for tapping into service lines with a minimum of difficulty when the additional space is added. Wherever a heating or air conditioning system is used, thought should be given to the additional capacity which will be required if expansion becomes necessary.

TYPES OF BUILDINGS

All things considered, the single story building is generally preferable for a vocational program. In this case the need for stairs and stair climbing is eliminated, and this is even more important in a vocational than in an academic building. Vocational courses often require large and heavy equipment for instructional purposes and this equipment has to be changed and replaced periodically as it becomes out-dated. The courses also require a far greater supply of instructional materials than do courses of an academic nature. These materials are often heavy, bulky, and not easily handled. Therefore, when shops or laboratories are located above the ground level, serious problems arise in transporting equipment and supplies to the upper floors of the building. Costly lifts and freight elevators become necessary. Extra strength must also be built into the structure to support heavy equipment if it is to be used above the first floor.

Nevertheless, in locations where site costs are very high, as in cities, it is sometimes necessary to build multi-story vocational schools, because sufficient land area is not available for a one-story building. In such cases satisfactory buildings can be designed, providing that all the problems of installing equipment, delivering bulky supplies, moving vehicles in the building, and moving people between floors are anticipated and provided for. An arrangement which has been used successfully in some places has the shops and laboratories in one-story wings, with ample delivery and service areas adjacent, while the central part of the building houses classrooms and offices and is constructed with two or more floors.

THE I TYPE

Three general styles of buildings are finding frequent use in various parts of the country. These are the "I" type, the "U" type and the "Campus" type. The "I" type building consists of a center section, with a wing at each end placed at right angles to the center, each wing forming "T" with the center structure. A center corridor through the center section and through each of the end wings gives inside access to every shop, classroom, office or other space. At the same time every room has outside exposure, and by paving the outside area, every shop and laboratory has access to direct delivery, through appropriate doors, for equipment, supplies and materials. Overhead doors can make possible the movement of vehicles and large equipment in and out of shops where necessary.

THE U TYPE

The "U" type building is very much like the "I" design, except that the wings form a "U", rather than a "T" with the center section. The court formed by the "U" can be partially paved for delivery purposes. It can also be partially landscaped to provide an attractive appearance.

THE CAMPUS TYPE

The "Campus" type of structure makes use of several separate units, each having two or more shops or laboratories of the same general nature, sometimes connected with covered walks to a central building which usually houses administrative and related functions. The campus arrangement requires a relatively large site. Community colleges and technical institutes often make use of the multi-building arrangement, with separate buildings for shops, laboratories, classrooms, libraries, food service, and administration.

SHOPS AND LABORATORIES

Most vocational courses require shops or laboratories for teaching the practical aspects of the various occupations. These usually need to be much larger than the usual classroom. The actual floor area needed will depend upon the nature of the instruction and the equipment to be used. Provision should be made for at least twenty or twenty-five work stations, with additional space for the instructor, for storage, and for general needs. There are no square foot per pupil standards which can be applied to all shops, but in planning shops and laboratories, it is better to be generous in allocating space than to find later that the space allowed is inadequate. The provision of plenty of working space for students is, among other things, a safety feature.

DEMONSTRATION AND PLANNING AREAS

In addition to the space needed for actual work stations, every shop or laboratory should have a suitable group instruction and demonstration center. Also accessible should be a student-teacher planning area, equipped with tables and chairs, a shop library, chalkboard, tackboard, and facilities for using audio-visual materials. In some places this has been achieved by constructing a glass enclosed classroom-workroom in one section of the shop area, or located to serve two adjacent shops. The glass enclosure permits easy visual supervision by the instructor of students at work in the center, or of the shop area when the instructor is inside the planning center, working with students. At the same time, such a center becomes a very useful auxiliary space, free from the noise and dirt of the shop, and well suited for individual group learning activities related to the actual shop work.

SPECIAL SERVICES AND PROVISIONS

Most shops and laboratories will need special mechanical and electrical services which are not found in ordinary school teaching space. These may include water, gas, special electrical lines, compressed air, and, in some cases, piping to supply gases, as for welding. Some types of shops will need special ventilation and exhaust systems. Certain subjects, such as food preparation, and health occupations must meet special sanitary requirements of State and local codes. All such matters should be carefully investigated before a building is designed. Also to be considered is the possible use of the same space for quite different occupations, and, to the extent possible, the flexibility in construction which this implies.

TOOLS AND SUPPLIES

Shops must also have adequate tool storage and distribution arrangements, and facilities for receiving, storing and distributing instructional supplies. A tool room separated from the teaching area by open wire-mesh partitions has much to recommend it. It is light, well ventilated and subject to visual supervision. It can also be readily moved, adding to flexibility. Often such a tool room can be located so that it will serve two large teaching areas or shops.

Mention has been made of the need for having each shop capable of receiving direct delivery of supplies and equipment. This is the great value of the ground floor shop, placed at grade level, with full outside exposure. Over the years a tremendous amount of material handling will be avoided with such an arrangement. Plenty of storage space for supplies and materials, readily accessible to each shop, must, of course, be provided. Most shops require an auxiliary room. In addition, for many occupations, storage space for students' materials is very necessary.

OTHER FACILITIES

Toilet and sanitary facilities should be carefully planned. Small, one or two station toilets accessible from each major teaching area are in many ways preferable to fewer, larger and more centrally located units. The cost, however, may be greater. The age and maturity of the students to be served may be a factor in making this decision. In addition to toilets, all shops will need adequate drinking fountains and ample washing facilities. Many excellent units for group washing purposes are on the market. For some types of work, such as foods, health, and certain building trades, showers may be desirable or may be an actual requirement. Showers and dressing rooms need to be adjacent to the instructional areas they serve. All shop areas should have locker space where students can place shop clothing.

Many vocational courses are not taught in shops, and teaching areas suitable for the subject to be taught must be provided. Some of these are quite specialized, such as the retail store environment which may be needed for distributive education courses, the hospital-type facilities used to teach nursing, and the office-like arrangements for business education. Whatever the demands of the particular curriculum may be, certain general features need to be emphasized. Among these are generous amounts of space and appropriate dimensions for the activity involved.

CLASSROOMS AND OTHER SPACE

The amount and kind of space needed in addition to shops and laboratories will depend greatly upon the type of program planned for the building, and the students to be served. When the building is to provide only for the occupational courses, the only additional space required will be for administration, library, guidance and a first-aid clinic, together with general sanitary facilities and necessary classrooms. Where students are to attend on a full-time basis, some provision must be made for food service. In many communities area vocational schools are being planned which will receive students from several feeder schools on a part-time schedule, with many students completing their other educational requirements in their home schools. For these students, food service is generally not needed at the vocational center.

In a building which is to provide for the entire education of the students, academic as well as vocational, it will of course be necessary to include all the features of a complete school. This will call for all necessary classrooms, general purpose rooms, conference rooms, library, sanitary and health facilities, arrangements for feeding, and very possibly an auditorium and facilities for physical education. Modern vocational schools, as well as technical institutes and community colleges, are being constructed with all of these features.

EQUIPMENT

The equipment to be used in teaching a vocational course should be of the type and variety found in places where the occupation is practiced. This is a part of the effort to have all vocational training be as realistic as possible, so that the transition of the student from school to job may be smooth and successful. The vocational educator is confronted with the constant need for keeping instructional equipment up to date and modern, because, with few exceptions, this is the practice in the world of work. In addition, all equipment must be kept in good, safe operating condition.

Clearly, this calls for adequate funds, both for maintenance and for replacement. Nothing detracts more from the quality of a vocational program than the attempt to offer instruction with worn-out or obsolete equipment.

Detailed specifications should be prepared for equipment to be purchased. Trained vocational instructors, assisted by advisory committees, are usually the best source of information when deciding upon what equipment to install.

All equipment should include every possible safety device. Such protection is needed by every worker, and is especially important when inexperienced learners are involved. Many employers of vocational graduates have said that they value most the training in safe working habits which these graduates have received. Equipment should be placed in the instructional area with careful regard for safety, and without crowding. Every possible safety feature should be built into vocational shops and laboratories, including one or more master controls within easy reach of the instructor, which will permit instant cut-off of all power to machines and equipment. Provision must also be made for the safe storage of flamable materials.

ENVIRONMENTAL FEATURES

The planning of vocational facilities for day and night, year-round utilization adds the need for emphasis upon certain important features. One of these is lighting. The best possible natural lighting should be provided, and, in addition, excellent artificial lighting. There is some tendency to create windowless buildings in order to achieve more complete interior atmosphere control, and in such buildings all lighting is artificial. Adequate emergency exits from all rooms must be provided in accord with local codes.

The use of air conditioning in vocational buildings is well worth considering, and is essential for year-round use in many parts of the country. It is much more effective and economical when made a part of the original design and construction.

Many types of vocational instruction generate a considerable volume of noise. Acoustical control, through the use of modern acoustical materials is well worth the investment in terms of acoustical comfort and improved learning. This is also important in libraries, cafeterias, and auditoriums.

In planning a vocational building, full utilization of all forms of audio-visual communication should be anticipated. This may take the form of a comprehensive information and communications center which can receive telecasts and pipe incoming programs to individual rooms and shops. The use of closed circuit television for instructional purposes within the building should also be provided for. Full use of films, slides, microfilms and video-taped materials, their storage and distribution should be planned for.

In addition to room and shop libraries, every modern vocational building needs a central library to house a constantly growing collection of technical and general materials. Such a library should be located in the building so that it can be open to non-students, as well as students, and at times other than the usual hours of instruction.

FLEXIBILITY AND ATTRACTIVENESS

Reasons for planned adaptability in vocational buildings have already been given. A building, once constructed, is likely to be in use for many years. Yet the kinds and nature of the occupations which are taught in it undergo change, and it is probable that these changes will be more frequent and more complete in the future than in the past. A completely flexible building may be impossible to design, but there are certain arrangements which can be a part of the original structure and which will greatly increase the ease of accommodating program changes through different uses of the same space. One of these is to avoid as much as possible the use of interior load bearing walls, to use as few interior partitions as possible, and no partitions of a permanent type. Large, open-floor areas are the most desirable. Various occupational activities can be conducted in such areas with as few separating walls as possible. Such separation as may be necessary can often be achieved by partial partitions, wire mesh separators, or other devices which can be easily removed and rearranged if necessary.

To add to the freedom of space use and to facilitate different use of space, much is gained by having power and other essential services available from a grid of overhead lines, or a floor grid, so arranged that service to individual pieces of equipment can be easily provided to any spot on the area floor. It is more difficult to provide flexibility with water, sewer and drainage services; but consultation with experts in these matters can often result in a degree of flexibility which would otherwise be much more limited.

In the construction of vocational facilities every effort should be made to achieve an attractive as well as a functional result. There is no reason why a building designed for vocational instruction should not have as much esthetic value, both exterior and interior, as any other modern school building. Business and industry have found that pleasant and attractive surroundings are not only appreciated by workers, but that they also improve the morale and attitudes of the work force. At the same time the facility becomes more of an asset to the community. The same is true of a school, its students and its staff. Students will be attracted to a vocational school which is modern, attractive and well-designed. They will tend to avoid a program which is housed in dingy or unattractive quarters, and the image of vocational education suffers when this occurs.

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Chapter XVI

THE ROLE OF THE PRACTICAL ARTS IN VOCATIONAL EDUCATION

THE VOCATIONAL ADMINISTRATORS AND THE PRACTICAL ARTS

It may appear to some that any discussion of the practical arts would be outside the scope of this volume, because, by definition, the practical arts do not have vocational objectives. On the other hand, the subject matter of the practical arts bears a close relationship to several of the well-known areas of vocational education and experienced vocational leaders have long been aware of the supporting role which the practical arts can play in making a program of vocational education more successful. Recognition of this is found in the growing practice by school boards and superintendents of assigning overall responsibility for practical arts to the administrator of the vocational program. Since this is the trend it is appropriate that some of the relationships between the two fields should be considered.

DIFFERENCES IN GOALS

Most laymen, and not a few educators, find difficulty in distinguishing between the practical arts and vocational education. This is because both subjects involve similar subject matter, similar teaching materials, and somewhat similar facilities and equipment. To the casual observer both programs may appear to be teaching much the same thing. Actually, there is a great deal of difference in the purposes and outcomes of the two programs.

The practical arts usually include those phases of agriculture, business education, fine arts, homemaking and industrial education (in the form of industrial arts), in which occupational efficiency is not the major goal. On the other hand, occupational efficiency is the chief goal of vocational education. Vocational education purposes center primarily around training for specific jobs or for clusters of closely-related occupations. The practical arts are conceived and taught as a part of non-specialized, general education. They are intended to help all students understand and appreciate the technological and practical aspects of a highly industrialized society, and to assure that the schools will provide for all students a technological literacy which life in a modern society requires. Vocational education builds on this foundation knowledge with specific job-related preparation for those whose occupational choices lead them in this direction.

RELATIONSHIPS TO VOCATIONAL EDUCATION

The practical arts are associated in many ways with vocational education. They provide experiences in handling tools and materials, becoming familiar with the skills, and understanding the processes related to major areas of work. They are particularly useful when they make available exploratory experiences that help young people to discover vocational interests and aptitudes. One purpose of the practical arts is to help students to know and appreciate the products of business and industry in terms of consumers' or users' values.

Perhaps the greatest contribution of the practical arts to vocational education is in the area of guidance. Some educators believe that the practical arts have more vocational guidance values than any other school subject. The teachers of practical arts subjects are in a very good position to bring to students the experiences and the information which will help them to make better vocational choices. Under their direction, students can learn about their own interest or lack of interest, in a variety of occupations, by participating directly in the activities which are characteristic of those occupations. They can also learn whether they have any real aptitude for the occupations which they may be considering. Many vocational educators rely heavily upon the reports of practical arts teachers in determining the potential for success of students in vocational courses. Vocational educators should keep in mind, however, that many factors enter into the success patterns of students in vocational courses, and students considered doubtful in potential by practical arts teachers should not necessarily be disqualified from vocational courses. On the other hand, students who are recommended strongly by their practical arts teachers, are usually very good prospects for vocational courses.

The fact that practical arts programs have guidance value for vocationally interested students should not let that objective dominate the other valuable outcomes of such programs. The practical arts have their own important contributions to make to the complete education of all students, and they should be valued for this reason. They are not intended to be pre-vocational except in so far as they may assist students to make a better vocational choice.

THE VALUE OF JOINT ADMINISTRATION

There is much to be said for the practice of placing the practical arts and the vocational education program under the same leadership at the local level. The local administrator should be fully aware of the differences between the two programs, and the particular purposes of each, so that he can see to it that both programs develop in ways required by these pruposes. At the same time, the two can be coordinated so that they are mutually supportive and so that each helps to improve the other.

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Chapter XVII

EVALUATING THE PROGRAM

WHAT EVALUATION MEANS

As used in education, the term evaluation has come to mean the process of determining how well educational goals are being met. Individual students may be evaluated to determine their learning progress, for example, but our concern in this chapter is for the evaluation, in the larger sense, of a local program of vocational education. This requires the careful identification of the goals of the program, and then a systematic and critical look to decide how well and in what ways the program is reaching the goals it has set for itself. The chief purpose of program evaluation is program improvement. An unevaluated program tends to operate without change, because those responsibile for it are unaware of the need for change. When no evaluation occurs, it is easy for the vocational administrator and the vocational staff to lose sight of their goals, and to allow the program to gradually lose relevance and become outdated.

Program evaluation is not an evaluation of individuals. It is not a personnel rating system. When properly understood and conducted it does not represent a threat to anyone, but rather forms the basis for providing a better program, with more satisfactions for all who are engaged in it.

THE BENEFITS OF EVALUATION

There are several reasons why a vocational program should be subject to frequent evaluation procedures. For one thing it compels the vocational administrator and his staff to define clearly the program goals and to review these goals periodically. All evaluation, if it is sound, is based upon the specific goals, and purposes which are accepted by those who are conducting the program. The members of the vocation staff should be thoroughly involved in every evaluation of their own program. This can become a very valuable professional learning experience for staff members. It also develops a readiness on the part of the staff to make the changes and improvements which are suggested by the evaluation process.

Evaluation can form the basis for reporting professionally and publicly upon the progress and success of the program. Evaluation results can also be used to secure additional financial or other forms of support when unmet needs are revealed. The vocational program, like all other aspects of the total educational program, must expect to keep a number of individuals, and the public at large, informed of its achievements and progress. The superintendent of schools or the president of a community college, the members of governing boards, such as a Board of Education, and members of vocational advisory committees, must be regularly supplied with information about strengths and weaknesses of the vocational program. If this is not done they will tend to form their own judgements, sometimes based on inaccurate information, and these judgements may not be completely fair or properly balanced.

ELEMENTS OF GOOD EVALUATION

To be useful, evaluation should involve the cooperation of all who are participants in the vocational program–staff, students, parents, employers, labor officials, guidance personnel, and related public agencies. It should be comprehensive in its effort to measure the degree to which all of the program goals are being reached. It is not enough to assess the quality elements of the program althouth this is important. It is also necessary to know how well vocational education is meeting the quantitive test–that is, serving the needs of all those who can benefit from it. The vocational needs of individuals vary considerably. Some seek career guidance, others need to prepare for their first entry into the labor force, while still others look for re-training or for job up-grading education. Evaluation should concentrate upon progress being made, and not limit itself to comparisons with other programs or with presumed norms. Further, evaluation should deal with both long-term and short-term goals. Some aspects of a program can show improvement in a short period of time while others will require study over a period of years in order to judge effectiveness.

EVALUATION AS A BUILT IN FEATURE

Many attempts at program evaluation have met with limited success because planning for the evaluation process was not done when the program was begun. In some cases this meant that goals were not as clearly developed as they should have been. When goals are being established, at the outset of a program, three important questions relating to future evaluation should be asked with regard to each goal:

1. What means will be used to measure progress toward this goal at the time of evaluation?
2. What information will be needed at that time if a progress measurement is to be made?
3. What data will need to be collected and maintained and what steps taken, from the outset of the program to assure adequate information at a later time?

For evaluation purposes it is not enough to set up vague, general goals. Standards of accomplishment need to be agreed upon in advance and stated with precision. If the evaluation process is built into the program at the beginning, evaluation is more easily accomplished, and produces more confident results when the time for it arrives.

FREQUENCY OF EVALUATION

What has just been said should not lead to the conclusion that program evaluation is an activity which occurs only at long intervals, receiving no attention during the intervening periods. All aspects of a program should be under constant review by members of the vocational staff. There are some program changes which cannot be easily observed in a short period of time, and there is merit in providing for formal, depth-evaluation of a program at regular intervals. The practice of using qualified personnel from outside the staff and the community to participate in evaluation can bring a perspective that is often very valuable when coupled with the results of a self-evaluation. National, regional, and State accrediting agencies have tor many years been providing program evaluations for general high schools, community colleges and professional schools. There has been much discussion about creating an accreditation procedure for vocational education, but at this time it is lacking. However, local leaders can usually secure help from competent university personnel, from vocational educators from other areas, and from the office of the State Director of Vocational Education if they desire outside participants in a program evaluation.

At the national level, the Congress has clearly recognized the need for systematic evaluation of the vocational education program. The Vocational Education Act of 1963 requires that the President appoint an ad hoc Advisory Council on Vocational Education at five-year intervals to review the entire program and to make recommendations for necessary changes in legislation. The first such Council was appointed early in 1967 and made its report in 1968. It would not be surprising if major evaluations at State and local levels would, in the future, be structured to relate to this five-year national review cycle.

WHAT EVALUATION SHOULD INCLUDE

If evaluation is to concern itself with the extent to which program goals are achieved, those goals must be clearly and sharply defined. The chief goals of a local program of vocational education are:

1. To prepare young people for gainful employment in a world of work undergoing constant technological change.

2. To assure that these young people will also have the competence for effective citizenship and community living.
3. To prepare these young workers for social competency and a successful role as human beings.
4. To provide necessary work preparation for all youth and adults who require it, regardless of their economic, social, academic, or other handicaps.
5. To meet the needs of the employed for job upgrading and the needs of the unemployed for retraining.

This is a formidable task, but it is one that vocational education is called upon to achieve as its primary mission and as a part of the national educational enterprise.

ITEMS TO BE EVALUATED

Numerous factors influence the capacity of a program to meet these goals, and each can be studied in appropriate ways to estimate its effectiveness. Among the items to be evaluated are:

Administration and educational leadership
Program organization
Adequacy of program coverage
Curriculum and instruction
Adequacy of staff in numbers, preparation and experience
Supervision of instruction
Adequacy of instructional supplies, devices and materials
Adequacy of plant, facilities and equipment
Placement and follow-up of graduates
Student admission policies
Extent of upgrading services to employed persons
Extent to which all who need vocational education are served
Guidance, counseling and student advisement
Effective use of advisory committees
Finance

This is not an exhaustive list, but it is sufficient to suggest some of the program dimensions which need to be examined when program quality is being measured.

TECHNIQUES FOR SECURING EVIDENCE

Several well-known methods can be utilized in the appraisal of the elements of the vocational program which are selected for study. The means for securing information should be appropriate to the nature of the information sought. Among the methods and instruments which can be used for either self-evaluation or by outside evaluators are the following:

Structured interviews, using carefully prepared guide sheets, with teachers, administrators, students, parents, counselors, employers, union officials, members of school boards, and officials of community agencies.
Questionnaires to some or all of these individuals.
Examination of records relating to those program areas for which records should be available.
Review of written courses of study and other evidence of curriculum content.
Observation and inspection of facillites, equipment, supplies and teaching aids and materials.
Observation of instructional practices, using carefully constructed check lists.

In using any of these date-gathering devices, it is well to prepare in advance a detailed check list for each aspect of the program which is to be studied. Members of the vocational staff should share in the development of these check lists which they or other evaluators will then put to use. A good plan is to require the evaluator to rate each item on a check list, using one of the following designations:

1. Much evidence
2. Some evidence
3. Little evidence
4. No evidence
5. Does not apply

The evaluation can be made more objective if the evaluator is asked, in rating each item, to provide a brief statement to support the rating he has assigned.

No regional or national check lists have been developed exclusively to evaluate programs of vocational education, but some individual States have prepared such lists to assist in evaluating vocational programs. The Vocational Division of the New York State Education Department, for example, has produced a series of evaluation guides entitled "A Guide for the Review of a Program in Vocational Industrial Education." Local administrators would be well advised to seek the advice and help of the vocational officials in their State Department of Education when planning for program evaluation. Some of the references at the conclusion of this chapter also contain useful suggestions for creating check lists.

REPORTING EVALUATION RESULTS

The evaluation process has little value unless the findings are made known to those who can take the steps necessary to improve the program. This means that a clear, factual report of the findings and recommendations should be prepared and shared with Board of Education members, the superintendent or school president, the staff, employers, union officials, members of advisory committees, and the community.

Reporting the results of an evaluation can be done informally by conducting briefing sessions with staff members and other groups, where findings can be presented and discussed. This should be followed by a distribution of the formal, written report.

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Chapter XVIII

THE VOCATIONAL LEADER AND RESEARCH

In a society where research has made great contributions to the advances in agriculture, health and industrial products, education has benefited less from research than might be expected. One reason is that, until recently, a relatively small amount of education's resources have been devoted to research. Another reason is that research in the behavioral sciences, which include education, presents many difficulties to the researcher since the measurement of behavior is less exact than measurement in some of the other sciences. Furthermore, the amount of research in vocational education has not been as extensive as the research in many other aspects of education. All this is changing, however, and greatly increased support for vocational educational research has recently been provided.

THE GROWING EMPHASIS ON RESEARCH

There is a growing recognition that if research has helped to produce such important economic and social benefits in other areas, it may be able to raise the quality and effectiveness of education, including vocational education. Recent Federal legislation relating to education has clearly favored this concept. Policies and activities of government at national and State levels have reflected the new emphasis upon research as a tool for improving education.

The Elementary and Secondary Act of 1965 appropriates substantial funds for research, and goes further by establishing a series of educational research and development centers throughout the country. The Vocational Education Act of 1963 specifies that ten per cent of the total money available under the act annually shall be spent for research under the control of the Commissioner of Education. It further requires that a portion of the remaining funds which are allocated to the States be spent on auxillary services, including research. A Division of Adult and Vocational Education Research has been established in the United States Office of Education to provide leadership and coordination for the growing research effort. Two major centers for vocational and technical education research have been established, one at Ohio State University and the other at the University of North Carolina. In a very short period of time the majority of the States have organized Occupational Research Coordinating Units to give leadership to research in vocational education at the State level. In addition, substantial amounts of private funds, notably from the private foundations, are being directed toward vocational education research.

THE LOCAL ADMINISTRATOR AND RESEARCH

Increasingly, the local vocational administrator will have available to him the reports of studies and investigations into the issues and questions which concern vocational education. The findings of such research will need to be considered when policies and practices are being decided. In addition to studies which bear directly upon vocational education, the administrator will find himself confronted with a growing volume of research from closely related fields, such as manpower economics, guidance, and occupational information. It seems certain that vocational education will be much more influenced in the future by the findings of research than it has been in the past.

The vocational administrator will be expected to be familiar with the major research which relates to vocational education, and to respond to its findings when they point to changes which can result in improved practice. More research which is relevant to vocational education will continue to be produced, and it will be widely disseminated. In addition to being reported in professional journals, it will frequently be presented in the popular press.

This has already occured with some important and far-reaching research concerning vocational education. Thoughtful lay citizens, as well as educators, reading such reports, are bound to raise questions, which the vocational administrator must be prepared to discuss.

RESEARCH TRAINING FOR THE VOCATIONAL ADMINISTRATOR

The vocational administrator will find it necessary to have sufficient training in research to enable him to make the best possible use of the increasing amount of research which will become available. Research will affect his activities in at least three ways.

AS A CONSUMER OF RESEARCH

All of this means that the vocational administrator will need to possess sufficient knowledge of research processes and usage so that he may be an intelligent critic and consumer of research. Research reports are often written in terms which require careful interpretation. The administrator must be able to read research reports with understanding and interpret them accurately. Not all research is of equal quality or relevance to the vocational program. The administrator should be able to evaluate the quality and relevance of the research which is reported. To do this he will need some training in the basic principles of research techniques.

Above all, the administrator must cultivate an objective attitude toward research—an attitude which will minimize his own biases, and enable him to take advantage of useful research findings to improve the program for which he is responsible. A negative, defensive attitude toward good educational research because it does not always confirm present theory or practice, is not consistent with an era in which research is clearly bringing more elightenment and better practice to so many areas of human endeavor.

AS A PARTICIPANT IN RESEARCH

The vocational administrator will also encounter research decisions of another kind. In order to advance knowledge and improve practice, researchers will often need to study present arrangements and practices. This may involve gathering data concerning students, educational results, staff and staff preparation, instruction, administration, and many other elements of the program. The administrator may often be called upon to lend his cooperation and to contribute from his experience to such studies. It may not be possible to respond to all such requests, and an administrator has an obligation to protect students and staff from excessive or questionable demands upon their time for research purposes. Nevertheless, he also has an obligation to help make worthwhile research possible through the professional assistance he may be able to render. Here again, some basic training in research will help him to discriminate among those requests which he receives for such assistance, and to select for participation those proposals which are well–designed and potentially most valuable.

AS A RESEARCHER

Finally, a local administrator may, from time to time, need to plan and conduct limited kinds of research relating entirely to his own program. This may be informal, but nevertheless useful studies which are needed to solve purely local problems, and which can be accomplished through the efforts of the local staff. Studies of this kind should be done with knowledge of sound research practices, and suggest a further reason for some basic, although not necessarily extensive training in research for the vocational administrator.

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